

SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF LOS ANGELES

NORTHROP	CORPORATION,	)	Case	No.	556129
	Plaintiff,	)			
vs.		ý			
EVANSTON	INSURANCE CO.,	į			
	Defendant.	į			
AND RELAT	TED CROSS-ACTION				

## VIDEO-TAPE DEPOSITION OF (b) (6)

Taken on behalf of the Defendant Pacific Indemnity Co. at the Laurel Room, Great Smokies Hilton, Hilton Inn Drive, Asheville, North Carolina, commencing at 9:30 a.m. on Tuesday, May 16, 1989, pursuant to Notice.

BEFORE: Patsy R. Headley, Certified Shorthand Reporter, Registered Professional Reporter, Notary Public

TRANSCRIPTS PLUS
33 Tanglewood Drive
Asheville, North Carolina 28806
(704) 255-0093



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1	MR. WHEELER: It is 9:30 a.m. on Tuesday,
2	May 16. This is the deposition of (b)(6) in the
3	Northrop case pending in the Los Angeles Superior Court.
4	My name is Charles Wheeler. I am an attorney
5	representing Pacific Indemnity Company.
6	I would just like to go around and have the
7	other people in the room identify themselves so that we
8	can know who is present.
9	THE VIDEOGRAPHER: Would you say the time
10	again?
11	MR. WHEELER: 9:30 a.m.
12	MR. GOLD: My name is David Gold. I am with
13	the law firm of Adams, Duque & Hazeltine, representing
14	Puritan Insurance Company.
15	MR. LANE: My name is Don Lane. I am with
16	the law firm of Keating, Muething & Klekamp, representing
L 7	Great American Insurance Company.
18	MR. COLVIG: My name is Timothy Colvig from
19	Lempres & Wulfsberg, representing Evanston Insurance
20	Company.
21	MR. WARREN: My name is Bob Warren. I am a
22	lawyer in Black Mountain, North Carolina. I am
23	representing Mr. Radford.
24	MR. SEIFE: My name is Darrell Seife. I am
2.5	for First State, and I am from the firm of Siff, Rosen &

1 Parker. MR. SCHULTHEIS: My name is John Schultheis. 3 I am with Nimmo & Company, a consultant. MR. WARNER: I am Glenn Warner with Paul, 5 Hastings, Janofsky and Walker, attorneys for Northrop Corporation. 6 7 MR. WHEELER: Would you swear the witness in, 8 please. 10 called as a witness by and on behalf of the Defendant 11 Pacific Indemnity Company, being first duly sworn to tell the truth, the whole truth and nothing but the truth, 1.2 13 testified as follows: 14 EXAMINATION 15 BY MR. WHEELER: 16 Would you state your full name, please. ο. Α. 17 18 MR. WARREN: I need to make a statement, 19 please, for the record. 20 MR. WHEELER: Okay. 21 MR. WARREN: We would enter an objection at 22 this time that the use of this deposition has been limited 23 by the Court. We are willing to follow the Court Order, 24 but we just wanted to note the objection in the record. 25 Now we are ready to proceed.

1 (By Mr. Wheeler) I understand, (b)(6) that Q. 2 you have some health problems currently. Can you just 3 give me a brief description of what those problems are? 4 Α. 13 Q. Now, I note that you seem to have some trouble 14 breathing. Is that the case? 15 Α. 17 Well, this isn't an endurance contest today, Q. Okay. 18 so if you feel you need to stop and rest and catch your 19 breath, just tell us and we'll call a halt right then. 20 Α. Okay. 21 Would you state your address, please. 0. 22 Α. 23 Is that your home address? Q. 24 That's the zip code. Α. 25 Is that your home address? Q.

- 1 That's my home address. Α. Yes. 2 Q. Are you currently employed? 3 I am employed, but I haven't been able to work for Α. 4 a year. 5 Can you state your home phone number, please. Q. 6 (b) (6) Α. 7 And that's area code 704? Q. 8 Α. Yes. 9 State your age, please. Q.
- 13 Q. Do you have any children?

Are you married?

14 A. (b) (6)

(b) (6)

- 15 Q. Can you tell me what sex and how old they are?
- 16 A. (b) (6)
- 17 Q. And is your youngest a boy or a girl?
- 18 A. (b) (6)
- Q. Can you give me a brief description of your formal
- 20 | education?
- 21 A. I just finished the (b) (6)
- 22 **(b)** (8

10

11

12

Α.

Q.

Α.

- Q. And when was that that you quit school? What year,
- 24 approximately?
- 25 A. (b) (6)

```
Can you give me a short summary of your employment
 1
      Q.
 2
      history since you quit school?
 3
 4
 5
 6
 7
 8
 9
10
                   And then I went to work for Northrop, and
11
      after Northrop closed down I worked with Chemtronics till
12
      they laid me off, and I have been working
13
14
             What sort of work did you do for the
      Q.
15
16
      Α.
             What sort of work did you do for
17
      Q.
18
      Α.
19
      Q.
             Do you know what year, approximately, you came back
20
      to Asheville?
21
      Α.
22
             And did you start to work immediately for the
      Q.
23
24
      Α.
             Yes, uh-huh.
             What job or jobs did you have with the
25
      Q.
```

```
1
 2
      Α.
 3
              What sort of
      Q.
 4
 5
 6
 7
      Q.
             Did you work with the (b) (6)
                                                         until you
 8
      started to work for Northrop?
 9
      Α.
             Yes, sir.
10
             When you started to work for (6) (6)
                                                                what
      Q.
11
      did you do?
12
      Α.
             And you still are a (b) (6)
13
      Q.
             Yes, sir.
14
      Α.
15
      Q.
             What year did you start work at Northrop?
16
      Α.
17
              How did you get your job at Northrop?
      Q.
18
              They was running ads in the paper wanting people to
19
      work, and I just went out and applied for a job, and they
20
      gave me -- called me in for an interview and they hired
21
      me.
22
      Q.
             Did you apply for any specific job?
23
             No. I just applied for a job.
      Α.
24
      0.
             Do you remember the month that you went to work at
25
      Northrop?
```

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- 1 A. June.
- Q. What job did you receive in Northrop?
- 3 A. I was a material handler.
- 4 | Q. Did that job change while you were with Northrop?
- 5 I am sorry. In other words, did you do any other kind of
- 6 | job at Northrop while you were working there?
- 7 A. Just handling material, and then we would take the
- 8 | finished products to various places for testing.
- 9 Q. But you didn't, for example, do any assembly-type
- 10 jobs or anything like that at -- for Northrop; is that
- ll | correct?
- 12 A. No. I just kept the program supplied in material.
- 13 Q. Did you -- Strike that.
- Were you a materials handler for Chemtronics?
- 15 A. No.
- 16 Q. What did you do at Chemtronics?
- 17 A. I was -- I helped assemble some grenades, smoke
- 18 grenades and canisters -- smoke canisters.
- 19 Q. What were your duties at Northrop as a materials
- 20 handler?
- 21 A. Keeping all the programs they had going supplied
- 22 | with the raw material to make the finished product.
- 23 Q. Who was your supervisor?
- 24 A. (b) (6)
- 25 Q. Was that true throughout the period you were

- l | working for Northrop?
- 2 A. Yes. He was my supervisor, but a lot of times I
- 3 | would work on the second shift and had a different
- 4 | supervisor on second shift, but I was still responsible to
- 5 (b) (6
- 6 Q. Who was your supervisor on the second shift?
- 7 A. (b) (6)
- 8 Q. Can you spell that?
- 9 A. (b) (6) I think. I am not sure how he spelled
- 10 | it. It is (b)(6)."
- 11 Q. Why did you change jobs from the (b) (6)
- 12 | and Northrop?
- 13 A. They offered better benefits, and the pay was a
- 14 little more.
- 15 Q. When you started to work at Northrop did you
- 16 receive any orientation or training?
- 17 A. On-the-job training is all.
- 18 Q. Who did you receive that training from?
- 19 A. The men that was -- that had been working there.
- 20 They would put you with somebody that had been working
- 21 there for quite a while, and he would learn you.
- 22 Q. Who did you -- Strike that.
- Who were you put with to learn the job?
- 24 A. (b) (6) was one I worked with a lot. That's
- 25 | the one -- I started out with him.

- 1 Q. Do you know how the last name is spelled?
- 2 A. (b) (6)
- 3 Q. Was there anyone else who gave you any training?
- 4 A. No. That's all.
- 5 Q. Were you given -- Strike that.

6 Were you given any training by your

- 7 supervisors?
- A. He would just tell us to -- what material to pick
  up or stuff like that. He would -- He would take the
  orders over the phone, and we would go in and he would
  give us a list. We would go around in various places and
  pick up the material and take it to different buildings.
- Q. Can you give me a general description of what sort of materials we are talking about here?
- 15 A. Well, just different chemicals and explosive
  16 material to assemble what we were making, mostly the
  17 Mark 24 flares and 4.2 rockets and mostly explosive
- material. We would haul the raw chemicals to make the
- 19 stuff with.
- 20 Q. Were you given any instructions with respect to the
- 21 chemicals that you were handling when you first started on
- 22 | the job?
- 23 A. None.
- Q. Were you told that any of the chemicals were
- 25 dangerous?

- 1 A. No.
- Q. Did you find out from your co-workers that any of
- 3 the chemicals were dangerous?
- 4 A. They didn't know, either.
- 5 Q. Did you as you worked on the job learn that some
- 6 | chemicals were dangerous?
- 7 A. No.
- 8 Q. Was there any training in safety procedures when
- 9 you started your job?
- 10 A. The safety man that was out there, he talked to us
- ll and all, but we didn't have no safety training or
- 12 anything.
- 13 Q. Do you remember who that was?
- 14 A. I can't remember his name.
- 15 Q. Was it (6)(6) --
- 16 A. I can't remember.
- 17 Q. -- or a 1 (1) (6) ?
- 18 A. Oh, yeah, (b) (6)
- 19 Q. Do you remember what (b)(6) said?
- 20 A. Well, he just told us, you know, when we went into
- 21 | the buildings to be sure we had our safety shoes on, our
- 22 | coveralls and our safety glasses, and that's about it.
- 23 Q. Did you receive any training in emergency
- 24 procedures when you started at Northrop?
- 25 | A. No.

- Q. Did Northrop ever give you any training in emergency procedures?
- 3 A. No.
  - Q. Apart from what you have just testified that
- told you about safety procedures, did you ever receive any training from Northrop on safety procedures?
- 7 A. No.
- 8 Q. At some point in time did your job include the 9 handling of waste products?
- 10 A. Yes, sir.
- 11 Q. Can you tell me in general what your duties were
- with respect to waste products in terms of working at
- Northrop? And if they changed over time, tell me that.
- 14 A. Well, you mean the stuff that was supposed to be thrown away?
- 16 | O. That's correct, sir.
- A. Well, some of us would have to be on the trash
  detail to go around to the different buildings and pick up
  the trash and material that was discarded, and we would
  take it up to the burning ground and put it in a ditch for
- 21 | it to be burned and --
- 22 | Q. Now, was that your regular job?
- 23 A. No. That was just -- My regular job was to haul
- 24 the material to the buildings to make the product for the
- 25 programs we were working on.

- Q. Were there some employees who were assigned to the
- 2 | trash detail?
- 3 A. Yes. Later (b) (6) and (b) (6) took the
- 4 job over as regular men picking up the trash.
- Q. Were they the regular men when you started the job?
- 6 A. No.
- 7 Q. Were there any regular men at that time?
- 8 A. No. Just different ones would go around and pick
- 9 | it up, whoever (D)(6) would appoint to pick it up.
- 10 Q. How did you learn that you were to work on the
- 11 | trash detail?
- 12 A. Well, he would just pick somebody, or you just
- 13 | volunteered for it, because it was a pretty easy job. And
- 14 | you went around and picked it up and took it up to the
- 15 | burning ground. It was -- It was an easy job to do. A
- 16 lot of people volunteered to do it.
- 17 Q. It was easy in comparison to other jobs that you
- 18 | could have as a materials handler?
- 19 A. Yeah. Yes, sir.
- 20 Q. In what way was it easier?
- 21 A. Well, you didn't have to work too fast, too hard.
- 22 You just went at your own pace and go around and pick it
- 23 up, take it up to the burning ground.
- 24 Q. Did that arrangement of either volunteering or
- 25 being told to do the trash detail change while you were a

- l materials handler at Northrop?
- 2 A. Yes.
- 3 Q. How did it change?
- 4 A. Well, it -- They got a lot of contracts, and the
- 5 | job got bigger and the area got bigger, more work and
- 6 everything, and it became a regular job, and people bid on
- 7 the job. And  $\binom{(b)(6)}{(b)}$  and  $\binom{(b)(6)}{(b)}$  bid on the job
- 8 and they got it.
- 9 Q. Now, when you use the word "area," can you tell me
- 10 | what you mean by area? I don't understand whether it
- ll means physical area or area of work or what.
- 12 A. Area of work. The whole complex -- We took care of
- all the buildings in the complex where they had programs
- 14 | going.
- 15 Q. Now, when you say some employees bid on the job,
- 16 | how did they bid on the job?
- 17 A. The job would be up for bid. You just put your
- name in for the job, and they would award it to people.
- 19 Q. Did you put a bid in on the job?
- 20 A. No.
- 21 Q. Why not?
- 22 A. I didn't want the job as a regular job.
- 23 Q. Why was that?
- 24 A. I just didn't.
- 25 Q. I believe you testified that you worked a lot on

- the second shift; is that correct?
- 2 A. Yes, sir.
- 3 Q. What hours was the second shift?
- 4 A. From 4:00 to 12:00.
- 5 Q. Can you give me an estimate of how much of your
- 6 | work at Northrop was spent on the second shift?
- 7 A. I guess about a third of the time I worked out
- 8 there.
- 9 Q. And with respect to the other two-thirds, was that
- 10 | spent on the first shift?
- 11 A. Working days, yes, sir.
- 12 Q. Did Northrop have two shifts at all times while you
- 13 were working at Northrop?
- 14 A. They had two shifts, yes, sir, the whole time I
- 15 | worked there, and sometimes they had a third shift.
- 16 Q. Do you -- Strike that.
- Did you have any understanding as to why a
- 18 | third shift was added from time to time?
- 19 A. They got more work, more contracts, I guess.
- 20 Q. But you don't know specifically why?
- 21 A. No.
- 22 Q. Did you ever work third shift?
- 23 A. Yes, sir.
- Q. Did the Northrop plant run on the weekends?
- 25 A. Yes, sir.

- 1 Q. Did you work on the weekends?
- 2 A. Yes, sir. It didn't work weekends all the time.
- 3 Just when they had a lot of work to be done on certain
- 4 | contracts, we would work on the weekends.
- 5 Q. Is it possible to give me an estimate of the
- 6 | breakdown between the amount of your time spent in, shall
- 7 | we say, pick-up and delivery of materials and finished
- 8 products, on the one hand, and trash pickup on the other
- 9 | while you were with Northrop?
- 10 A. I don't know what you mean.
- 11 | Q. Well, for example, you say that you spent half your
- 12 | time on routine delivering of materials to the various
- 13 | facilities and then perhaps picking finished product up to
- 14 | move it around, or you spent two-thirds have your time
- 15 doing that?
- 16 A. Probably two-thirds of my time taking material to
- 17 | the buildings and all, and then maybe the rest of the time
- 18 | we were on the road delivering the finished product to the
- 19 testing areas where they would take it for tests.
- 20 Q. And when you say testing areas, those would be
- 21 offsite?
- 22 A. Different states, like Aberdeen Proving Grounds,
- 23 Maryland, and Crane, Indiana, places like that.
- Q. Were you a truckdriver?
- 25 A. Yes, sir.

- Q. And you drove trucks to deliver product to those
- 2 various testing grounds?
- 3 A. Yes.
- 4 Q. How often did you work on the trash detail, just in
- 5 general?
- 6 A. Not very much.
- 7 Q. How many days a week, say?
- 8 A. When I first went to work there maybe a couple of
- 9 days a week.
- 10 Q. Did that change?
- 11 A. Yes. After the -- After a certain amount of time,
- 12 maybe about six, eight months, they -- (6) (6) and
- 13 (b)(6) took over the job.
- 14 Q. And what happened then?
- 15 A. Sir?
- 16 Q. What happened then with respect to your working on
- 17 | the trash detail after they took over?
- 18 A. That was it. I just worked as a material handler
- 19 after that.
- 20 Q. Were you ever asked to help out with the trash
- 21 | detail?
- 22 A. Oh, when they would get short on help, like
- 23 (b)(6) was out, or if they had too much work, they
- 24 | would -- we would volunteer to take it. A lot of times on
- 25 | second shift the bins -- the trash bins would get

- overloaded. We would take stuff up to the burning grounds and stuff.
- Q. Did  $\binom{(b)(6)}{(b)(6)}$  and  $\binom{(b)(6)}{(b)(6)}$  work on the first shift?
- 5 A. Yes, sir.
- 6 Q. Did they ever work on the second shift --
- 7 A. No.
- 8 | Q. -- while they were trash handlers?
- 9 A. No.
- 10 Q. Now, I would like to focus, if I can, on your
- ll delivering raw materials to the various buildings at the
- 12 Northrop factory. When you would come in to work how
- would you receive your assignments, just in general?
- 14 A. We would just go in to work, and we knew what we
- were supposed to do and everything. We would just go
- l6 around to each building and check to see what they needed,
- 17 and we would just go around to the areas where the stuff
- 18 was stored and supply the buildings with the material that
- 19 they needed.
- 20 Q. So did you go to the buildings and check with
- 21 someone at the building what they needed?
- 22 A. Yes, sir. The foremens that were running over the
- 23 programs, we would go around and ask them what they
- 1 needed, or we would just go by and check the line, because
- we knew what they needed and all, you know, and when they

- would get low on material we would re-supply them with material.
- 3 Q. Where was the material stored?
- 4 A. Different places, different buildings and places,
- 5 different buildings.
- 6 Q. How did you move the material from its storage
- 7 | place to the buildings where it was being used?
- 8 A. We had trucks. We would load it on to a truck and
- 9 take it to the building and unload it with handtrucks or
- 10 carry it off.
- 11 Q. What sort -- Strike that.
- Did you wear any protective clothing?
- 13 A. Coveralls and safety shoes and safety glasses.
- 14 Q. Can you describe the coveralls for me?
- 15 A. Just regular cloth coveralls, mostly. They were
- 16 all worn and torn and all, but --
- They didn't protect you much.
- 18 Q. Were they supplied by Northrop?
- 19 A. Yes.
- 20 Q. Did Northrop clean the coveralls?
- 21 A. They had a laundry. When you -- The end of your
- 22 | shift, you would take your coveralls off and put them in
- 23 the laundry room. They would wash them.
- 24 Q. What sort of -- Strike that.
- 25 Can you describe the safety shoes for me?

- 1 A. They were steel-toed safety shoes with conductive
- 2 | soles to keep from having any sparks or anything when you
- 3 | walked on the floor.
- 4 Q. Were the safety glasses goggles?
- 5 A. Just regular safe-- just regular glasses.
- 6 Q. Were you provided with masks?'
- 7 A. Surgical masks, the type that fits over your mouth
- 8 | and nose. That's all we had.
- 9 Q. Did you have any gloves?
- 10 A. You could get gloves. They supplied gloves, but a
- ll lot of times we didn't have gloves.
- 12 Q. What sort of gloves did Northrop supply?
- 13 A. Regular work gloves.
- 14 Q. Cotton gloves?
- 15 A. Cotton gloves and -- Cotton gloves with leather
- 16 | palms, like the regular construction gloves.
- 17 Q. Did the protective clothing that you were provided
- 18 have any waterproof or liquid-proof qualities to it?
- 19 A. They washed them in flame-retardant material in the
- 20 | laundry.
- 21 Q. Did you have any additional protective clothing
- 22 | when you went inside buildings?
- 23 A. No.
- 24 Q. In your view was the protective clothing you were
- 25 provided adequate when you went into buildings?

- 1 A. No.
- Q. Why wasn't it adequate?
- 3 A. Well, a lot of the -- A lot of the coveralls was
- 4 torn, too big, too small. The zippers were broke. You
- 5 | couldn't zip them up in the front, so all it was, all we
- 6 | wore them for, was to protect our street clothes we wore
- 7 underneath our coveralls.
- 8 Q. So the clothing didn't provide you with any
- 9 protection from chemicals --
- 10 A. No.
- 11 Q. -- is that correct?
- 12 A. No.
- Q. Did the workers in the buildings wear different
- 14 kinds of protective clothes?
- 15 A. It depends on what program they was working on.
- 16 Where they made the CS and CS-2, the ones that were
- bagging the finished material, they wore air suits.
- 18 Q. Did you ever go into the area where the workers
- 19 | were working in the air suits to bag the CS and CS-2?
- 20 A. Yes, yes.
- 21 Q. Were you provided with any special gear when you
- 22 | went into those areas?
- 23 A. No.
- Q. Was the bagging process going on during that time?
- 25 A. Yes, it was going on.

- Q. Do you have any understanding why the workers wore protective clothing like air suits in the CS bagging area?
- 3 A. CS -- CS is a tear gas, you know, and CS-2 is
- 4 waterproof tear gas, and it would burn your eyes, throat.
- 5 You couldn't breathe or anything, so they had to use the
- 6 | air suits in order to work and breathe. You couldn't --
- 7 You couldn't go in the building unless you had that.
- The way we would take stuff in, we would grab
- 9 up a couple of bags, run it there, hold our breath, drop
- 10 | it on the floor and run out and breathe.
- 11 Q. Did you have any -- Strike that.
- When you went into the building to drop
- 13 | something off and went back out, did you have any physical
- l4 effects from being in the building?
- 15 A. Oh, yeah.
- 16 Q. Can you describe those for me?
- 17 A. Well, you would -- Your eyes would be watering.
- 18 You couldn't hardly see. Your nose would be running. You
- 19 would be coughing and gagging. You just couldn't hardly
- breathe or anything, coughing and everything.
- 21 Q. Did the foreman in the buildings ever notice that
- 22 | workers delivering materials or picking things up had
- 23 difficulties?
- 24 A. Oh, yeah. They seen a lot of it.
- Q. Was anything ever done by Northrop to protect you?

- 1 A. No.
- Q. Did you see other workers after they had been in
- 3 the CS and CS-2 bagging areas?
- 4 A. Oh, yeah.
- 5 Q. Can you describe what they looked like?
- A. Well, they would have big blisters all over their
- 7 hands and arms and neck and everything. They would have
- 8 to go to the First Aid Station.
- Most of the time when they would report in to
  work they would all go by the nurse's station. She would
  supply them with medicine, cream to rub on their skin, and
- 12 she would wrap their arms and hands with a gauze.
- 13 Q. Did you ever go to the nurse's station?
- 14 A. Yes.
- 15 Q. And was that after going to the CS bagging area?
- 16 A. One night we were taking a can -- a drum of OCBA.
- We went down to the warmer to get it. As I put it on the
- handtruck to pull it back, the cog was loose. It sloshed
- out on the floor, and I slipped, and we went sliding
- 20 across the floor and I got soaked in it, in the OCBA.
- 21 Before I could get down to the nurse's
- 22 | station I was broke out in big blisters. I went down and
- 23 | she gave me a shot, and I went and changed clothes and
- 24 took a shower and went and got some new coveralls and went
- 25 back to work.

- 1 Q. Did your street clothes get soaked by the OCBA?
- 2 A. Yeah.
- 3 Q. What did you do with the street clothes?
- 4 A. I throwed them in the washing machine and washed
- 5 | them so I would wear them home. When I got home I had to
- 6 take them off before I could go in the house and throw
- 7 them away.
- 8 Q. What is -- Strike that.
- 9 Do you know the technical chemical name for
- 10 OCBA?
- 11 A. It is a real long name. That's the reason they
- 12 | went with that name, OCBA, because you -- A lot of people
- 13 | couldn't pronounce it or anything. They just went with
- 14 the OCBA, and the NM is the same way. It's a real long
- 15 name.
- 16 Q. Do you know what process OCBA was used in?
- 17 A. CS and CS-2.
- 18 Q. Were you involved in any other accidents delivering
- 19 | materials?
- 20 A. Yeah. One night I was fixing to come home, and
- 21 (b) (6) worked the second shift a
- 22 lot. We were fixing to come home, and he had already left
- 23 and so they called down --
- One of the buildings called down and needed
- 25 some magnesium, and the magnesium was stored in a field in

- a tent, so I had to go out to get the Hyster and go in to get the -- get it, and when I raised the Hyster forks up to get the pallet of magnesium, one of the drums had fell over, so I got off the Hyster to straighten it up. When I did, it fell off and hit me on the foot and cracked a bone just below my big toe.
  - So I stayed out there until somebody come down and found me, you know, and I come on to the hospital. I mean, nobody -- security guards or nobody -- offered to take me to the hospital or anything. I drove myself to the hospital.
- and they said they would find something easy for me to do.

  Q. I would like to go back to your accident -- Strike that.

And then I went back to work the next morning

- I would like to go back to the accident with the OCBA.
- 18 A. Yes, sir.

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- 19 Q. Did your supervisor know about that accident?
- 20 A. I don't think so. I don't know if the nurse 21 reported it or not.
- Q. You didn't tell anybody about it other than the
- 23 nurse; is that correct?
- 24 A. No. My partner that was with me, he knew about it.
- Q. Who was that?

- 1 A. (b) (6)
- Q. Did you ever see any other employees delivering
- 3 | materials who were in accidents?
- 4 A. Not that I can think of.
- 5 Q. Did you ever hear about other employees having
- 6 accidents delivering materials?
- 7 A. Well, I don't -- I don't know. They didn't talk
- 8 about it, if they had any accidents or anything.
- 9 Q. Were there ever any problems with picking up --
- 10 Strike that.
- 11 Did anyone ever have any accidents when you
- 12 | were picking up product?
- 13 A. You mean get hurt?
- 14 Q. Yes.
- 15 A. Not that I know of.
- 16 Q. No one -- Strike that.
- How was CS bagged? I mean, what kind of bags
- 18 | was it in?
- 19 A. It was in waterproof bags. It would come out
- 20 | through a hopper and would fill these bags. I don't -- I
- 21 don't remember how much the bags weighed or anything. And
- 22 | they would sew the top up; then put them in paper -- those
- 23 bags into paper bags, sew those up. Then they would
- 24 | package them in 55-gallon drums.
- 25 Q. Did you pick up those 55-gallon drums?

- 1 A. Yes, sir. We loaded them on tractors and trailers.
- 2 Q. Did any of those bags ever break?

safety shoes. That's all we had.

3 A. Oh, yeah.

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- 4 Q. When did they break?
- A. A lot of times when they were coming out of the hopper and being sewn up they would burst. It would be just a real white fog in there at all times where the men worked. They had on air suits, but the material handlers that took the material up there, we didn't have the air suits or anything. We just had our regular coveralls and
  - Q. When you were delivering material to the various buildings how was that material packaged, just in general? In other words, was it in drums? Was it in boxes? How was it packaged?
    - A. Different. It was in drums and boxes and paper cartons and plastic jugs, different -- different types of containers.
  - Q. Did the containers have warning labels on them?
  - A. Not that I know of. I know the drums didn't have any warning labels on them. Some of the drums would have pieces of paper that would say "INFLAMMABLE" or something like that, but that's it.
  - Q. Were you -- Strike that.
- When you first started and worked for a

- l couple of days on the waste disposal or trash operations
- 2 was there a routine you followed?
- 3 A. Just going around different buildings and keeping
- 4 the area cleaned up, is all.
- 5 Q. How did you go around to the buildings?
- 6 A. Just drive up to the trash bins and check it. If
- 7 | they were a lot of trash or material that was being thrown
- 8 away we would load it up. When we got the truck loaded we
- 9 | would take it up to the burning ground and dump it into
- 10 | the burning ditch.
- 11 Q. What sort of truck was this?
- 12 A. It was a flatbed with the sideboards on it.
- 13 Q. How did you load the flatbed?
- 14 A. Just pick it up and set it up on the truck and
- 15 | arrange it in the truck where it would --
- 16 Q. Now, this material was in bins, you say?
- 17 A. Trash bins, yes, sir.
- 18 Q. How big were the bins?
- 19 A. Well, it all depended on how big the area was.
- 20 Q. Can you give me just a general idea? For example,
- 21 were they the kind of trash dumpsters you would see
- 22 | outside of an apartment house?
- 23 A. No, no. It was just a regular fence-like bin in
- 24 there.
- 25 Q. So would this be an area with --

- 1 A. It was just an area fenced off where they would put 2 the trash and stuff.
  - O. What sort of fence was it?
- A. Sometimes it would be a little old wire fence
  around, or sometimes it would be a wooden fence or
  something, just a regular marked-off area where they put
- 8 Q. How was liquid trash -- Strike that.
- 9 Was there any liquid waste?
- 10 A. Oh, yes.

the trash.

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- 11 Q. How was that put out to be picked up?
- 12 A. It was in -- They had a drum where they would put
  13 the liquid, and a lot of the liquid would be -- Some of
  14 the liquid would be in small plastic containers, but they
  15 would put it in the drums. And the stuff that was in the
  16 plastic containers, they would put it into the burning
  17 ditch.
  - But if the material was just liquid waste, they would pour it into the drums, and they would pour the liquid into the ditch up there next to the burning ditch.
- Q. Now, when you picked up a liquid waste in drums did
  you put the drum onto the truck?
- 23 A. Yes, sir.
- Q. So you didn't take the liquid in a drum and pour it into another drum?

- 1 A. No.
- Q. Okay. Did you have to take round drums and leave
- 3 them, empty drums, so they could put liquids in them?
- 4 A. Well, if they -- Sometimes they would have several
- 5 drums, you know. Like if they had a drum that had to be
- 6 hauled off, there would be another drum there they could
- 7 use until we got back.
- 8 Q. Was there any waste that you didn't take to the
- 9 burning ground?
- 10 A. Yeah. We took a lot of it offsite.
- 11 Q. How did you distinguish between the waste that you
- 12 | would take to the burning ground and the waste you would
- 13 | take offsite?
- 14 A. We didn't.
- 15 Q. In other words, how did you make a decision as to
- 16 | where to take the waste?
- 17 A. Well, when we would get a lot of cardboard and
- 18 stuff we would take it up to the landfill on 70,
- 19 Highway 70.
- Q. Was there any differentiation in terms of how the
- 21 | waste was put outside buildings -- between what could be
- 22 taken to the landfill and what could be taken to the
- 23 burning ground?
- 24 A. No. We just -- They just made -- We just took it
- 25 | wherever we wanted to. Like if we wanted to get out of

- the area for a while, we would just take it to another
- 2 dump site.
- 3 Q. In other words, if you wanted to leave the factory
- 4 for a bit --
- 5 A. Yeah.
- 6 Q. -- you could drive off and dump a --
- 7 A. Yeah, just drive off and take it to another dump
- 8 site.
- 9 Q. Did you have authority to do that -- Strike that.
- 10 Did you have authorization to do that?
- 11 A. We never did ask for any authorization.
- 12 Q. Do you know if (D)(6) knew you were doing
- 13 | that?
- 14 A. Oh, they knew we were taking it offsite.
- 15 Q. How did they know?
- 16 A. Well, they told us to take it up to the U. S. 70
- 17 | landfill, the heavy material like cardboard and stuff like
- 18 that, to keep from filling the burning ditch up so quick.
- 19 Q. Who told you that?
- 20 A. Our supervisors.
- 21 Q. And was that (0)(6)
- 22 A. (b) (6) or --
- 23 Q. (b) (6)
- 24 A. Yeah.
- 25 Q. When there was -- Strike that.

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Did you take cardboard waste offsite from buildings where chemicals were being produced?

- A. Yes.
- Q. Were there -- Strike that.

In that cardboard waste did you ever see or sense the presence of chemicals?

- 7 A. Oh, yeah.
- Q. Can you tell me what sort of chemicals were in that cardboard waste that you took offsite?
- 10 A. It was CS material and just different kinds of
  11 chemicals that we had picked up from the buildings. We
  12 just took it on and just dumped it off into the landfill.
- Q. So you would just go around in your truck and pick up from various buildings?
- 15 A. Various buildings, yeah, all buildings. We took
  16 care of all of them.
- Q. And you would just mix it up in your truck; is that right?
- 19 A. Yeah.
- Q. And you would just take the whole truck offsite; is
- 21 | that correct?
- 22 A. Just take the whole thing off and dump it.
- Q. Was that true at all times that you worked at
- Northrop when you were doing the trash work?
- 25 A. Yeah.

- Q. Do you know if (b)(6) and (b)(6) did the
- A. They did -- did the same. In fact, that's who I

  was with. (b) (6) was the one that was driving the
- 5 truck. He is the one that would take it off and dump it.
- 6 Q. And you went along with him?
- 7 A. I was just helping out, help him load and unload 8 and all.
- 9 Q. How would you load the materials, I mean things
  10 like cardboard? Just pick them up?
- 11 A. Just pick it up and throw it on the truck.
- 12 Q. Didn't have any shovels or anything?
- 13 A. Huh-uh.
- 14 Q. Did you ever get --
- That was "No"?
- 16 A. No.
- 17 Q. Sorry. That's one of the few rules of depositions.
- 18 A. Okay.
- 19 Q. Did you have -- Strike that.
- Did you ever get chemicals on your skin from picking up cardboard and the like and throwing it on the trash?
- A. Oh, yeah. You got CS powder all over you, and OCBA, NM, whatever you was working, and you would get it on your skin, on your clothing, in your shoes, everywhere.

- 1 Q. When you got it on your skin did you go wash it
- 2 off?
- 3 A. Yeah.
- 4 Q. Did you do it immediately?
- 5 A. No, not immediately.
- 6 Q. Did it cause a rash if you left it on your skin?
- 7 A. Well, about everybody that worked out there stayed
- 8 in a rash.
- 9 Q. And that was continuously?
- 10 A. Continuously.
- 11 Q. Did that worry you at the time?
- 12 A. No, because nobody told me that it would harm me or
- 13 | anything.
- 14 Q. Did you have a family doctor at that time?
- 15 A. Yes.
- 16 Q. Did you ever ask him about the rash?
- 17 A. No.
- 18 Q. Did he ever comment about it?
- 19 A. No. I hardly ever went to the doctor, anyway.
- Q. And when we are talking about getting exposed to
- 21 chemicals off of cardboard, this includes cardboard when
- 22 | you took it offsite; is that correct?
- 23 A. Yeah. Yes, sir.
- MR. WHEELER: Why don't we take a few-minute
- 25 break? It is 9:00-- or 10:16 a.m.

(Recess.)

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- MR. WHEELER: It is now 10:39 a.m.
- Q. I have a few sort of follow-up questions, if I could, (b)(6)

First of all, do you remember the name of the nurse that you saw when you had the OCBA burns?

- 7 A. No, sir. I can't remember her name.
- Q. Was it the same nurse throughout the period you
  were working at Northrop?
- 10 A. Yes. She worked there the whole time.
- 11 Q. Was her name Shirley?
- 12 A. Shirley, yeah, but I don't know her last name.
- And then there was another nurse later on there, too, but I don't know her name.
- 15 Q. Did you ever go see that nurse?
- 16 A. No. Shirley is the only one I had any contact
- 17 | with.
- 18 Q. Did you have a physical exam when you started at
- 19 Northrop?
- 20 A. I am pretty sure I did, but I can't remember.
- 21 Q. Was that by a doctor?
- 22 A. Yes, but -- I am pretty sure it was, but I don't
- 23 remember if they gave us a physical or not, but I was in
- 24 top condition. I was in good health when I went to work
- 25 | for Northrop.

- 1 Q. Did you have any skin problems at that time?
- 2 A. No.
- 3 O. No rashes?
- 4 A. Nothing.
- Q. When you were involved in the OCBA spill and you
- 6 went home, why did you leave the clothes outside the
- 7 | house?
- 8 A. Well, when I went in, the family was already in
- 9 bed, so I woke them up and (b) (6) came in there. They
- 10 | couldn't hardly breathe or anything. They was coughing
- ll and eyes watering and everything, and I told (b) (6) I had
- 12 | some stuff on my clothes.
- So (b) made me go back outside, and (b) (6) threw

  14 me some clothes out the door, and I changed clothes
- 15 outside and we threw the clothes away.
- 16 Q. Did you just put them in the trash?
- 17 A. Put them in a bag and then put them in the trash
- 18 can.
- 19 Q. When you picked up cardboard that had chemicals in
- 20 | it, how could you tell there were chemicals in the
- 21 | cardboard?
- 22 A. Well, you could see it. The CS was a white powder.
- 23 Q. But how did you know it wasn't some other
- 24 | substance, talcum powder or something like that. In other
- 25 words, how do you know it was CS?

- 1 A. Well, it would make your eyes water, and you would
- 2 | sneeze and cough and gag, and your eyes would run. Your
- 3 nose would run. Your insides would run out your mouth.
- 4 It would just jerk all your stuff out of you, make your
- 5 eyes water and all.
- 6 Q. Does CS have any particular odor?
- 7 A. Well, it is an odor, but you can't describe -- I
- 8 | can't describe the odor.
- 9 Q. Did you know what it smelled like, though?
- 10 A. If I smelled it, I would know what it was.
- 11 Q. Okay. So basically it was the effect of the CS --
- 12 A. Yes.
- 13 Q. -- that led you to believe that it was on the
- 14 | cardboard; is that correct?
- 15 A. Yes.
- 16 Q. Were there other chemicals besides CS on the
- 17 | cardboard or mixed in with the cardboard?
- 18 A. Well, yes.
- 19 Q. How could you tell that?
- 20 A. Well, you could see it. It would be in those
- 21 | little plastic jugs, and it would be -- The cardboard
- 22 | would be wet. You could smell it. You could smell the
- 23 different chemicals and know what they was.
- 24 Q. Can you tell me what different chemicals you can
- 25 | smell? Do you remember now?

- A. You could smell that OCBA, the NM. You could smell that Toluene and methylene chloride. There were so many different chemicals that was used, I can't remember all of them, but there was hundreds of different types of chemicals used in the programs out there.
  - Q. Were the chemicals you just described liquids?
- 7 A. Yes, sir.

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Q.

- 8 Q. And that is OCBA, MN, Toluene and methyl chloride?
- 9 A. Methylene chloride --
- 10 Q. Methylene chloride.
- 11 A. -- and acetone. I can't remember all of them.
- There was a lot of -- hundreds of different types of chemicals used.

Did -- Strike that.

- Did other employees ever complain about your having chemicals on your clothes?
- 17 A. Oh, yeah.
- Q. Can you tell me -- Can you describe when that happened?
- A. Well, during the -- When we would go in to have

  lunch -- We had a big lunchroom out there down in -- 128

  was where all the employees eat, and when we would come in

  they would clear out. You couldn't breathe.
- In fact, one time me and this partner of
  mine, we went down where the big shots were, and we had to

go get some requisitions signed. And we walked through
the building where all the head people were, and the
president called up there raising hell, wanting to know
who was down there with those chemicals on; called up
there and raised Cain with them and made us take our shoes
and our coveralls -- put them in a plastic bag and put
them up on the burning ground and burn them and told us

not to come down there any more with the chemicals on our

- 10 Q. Now, first of all, who was the president at that lime, if you know?
- 12 A. Mr. Cooper.

clothing.

- 13 Q. And did he speak to you directly?
- 14 A. No.

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- 15 Q. Who did he speak with?
- 16 A. I don't know.
- 17 Q. How did you hear about it?
- A. My supervisor called us in there, and we still had this stuff on, and he raised Cain with us, told us not to go back down there any more with material --
- 21 Q. Was he -- Go ahead. I am sorry.
- 22 A. -- with the chemicals on our clothing and shoes.
- 23 He said we cleared the whole building out down there.
- Q. And this was a regular occurrence when you ate in the cafeteria; is that correct?

- A. Oh, yeah. The people that worked in CS and hauled the trash and stuff and hauled the -- The material handlers that hauled the stuff out, we would get contaminated and, if we walked in a room, that room would clear out. They couldn't stand it. They couldn't
  - Q. Did they tell you that?
- 8 A. Oh, yeah.

breathe.

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- 9 Q. Did they ask you to leave?
- 10 A. No. They left. We had -- If we had the stuff on us, we could pretty well go where we wanted to and get rid of the crowd.
  - Q. Did your supervisor ever complain about your having chemicals on you?
    - A. No. He just told us not to go back down off the hill with the chemicals on us or anything, but we would have to go down there and get requisitions signed and get material to bring back up on the hill, you know.

Like we would have to go down and get cover-extra coveralls and shoes and safety glasses. We supplied everything to the buildings, so we would have to go down and get the material and bring it back up, but he told us next time we went down there contaminated that they didn't want us down there anymore, to make sure we was clean when we went back down.

- Q. Did you hear that anyone was concerned about your
- 2 safety from the chemicals?
- 3 A. No.
- 4 Q. So the complaint was simply that other employees
- 5 were bothered by the chemicals; is that correct?
- 6 A. Yeah. We run them out.
- 7 Q. Who was the supervisor who told you what he had
- 8 heard?
- 9 A. (b) (6
- 10 Q. Did you work with acids?
- ll A. Yes, sir.
- 12 Q. Did you know that acids were dangerous?
- 13 A. Yes, we -- I knew it was dangerous.
- 14 Q. How was it dangerous or -- Strike that.
- How did you know it was dangerous to work
- 16 | with acids?
- 17 A. Well, when the drum would spring a leak or anything
- 18 up at 113, they would close down the area until they could
- 19 | qet it fixed.
- 20 Q. Were you familiar with acids before that drum --
- 21 before these leaks would occur?
- 22 A. No. I never had any contact with acid or anything.
- 23 In fact, I never had any contact with any of these
- 24 chemicals before I went to work out there.
- 25 Q. Did you ever have any spills of acid while you were

- l delivering acids?
- 2 A. No, but they would spring a leak sometimes up at
- 3 | 113 and be a big cloud, so they would close down until
- 4 | they could get it shut off.
- 5 Q. Was 113 a production building?
- 6 A. That was where they made CS and CS-2.
- 7 Q. Was that the same building where BZ was originally
- 8 made?
- 9 A. Yes, sir.
- 10 Q. Did you ever clean up buildings?
- 11 A. No; just the warehouse sections of the buildings
- where we would just clean out sections where we had
- 13 | material coming in so we could store more material.
- I don't know who cleaned 113 out, but they
- 15 cleaned it out where they had made the BZ before and got
- 16 | the contaminated rags and material out and bagged it up in
- bags, and me and b (6) hauled the stuff up to the burning
- 18 pit and put it in the burning ditch.
- 19 Q. Okay. So you never were asked to go in and clean
- 20 out buildings --
- 21 A. No.
- 22 Q. -- is that correct?
- 23 A. No, sir.
- 24 Q. When you picked a barrel up -- Strike that.
- Going back to the testimony you had about

- l picking up materials to take up to the burning ground --
- 2 A. Yes, sir.
- Q. -- when you took a barrel up to the burning ground
- 4 | what did you do with it, typically?
- 5 A. Well, we hardly ever took the barrels up to the
- 6 burning ground. We only took the barrels that had the
- 7 | waste in them.
- 8 0. Uh-huh.
- 9 A. We didn't take the barrels that had the chemicals
- 10 in it that were used in the programs; just what was thrown
- ll away and put into the other barrels.
- 12 Q. I am focusing on those barrels now.
- 13 A. Yes, sir.
- 14 Q. The barrels where chemicals were thrown away and
- 15 | you took them up to the burning ground, what did you do
- 16 | with them when you got there?
- 17 A. We just drove up the side of the mountain, just --
- 18 There was a road that went all around the mountain. We
- 19 | would just pull up, throw the barrels over the hill and
- 20 let them roll down the hill.
- 21 Q. Now, was that -- Did you also deliver barrels to
- 22 | the burning ground or take the barrels containing waste to
- 23 the burn-- Let's go back and rephrase the question.
- Did you take barrels full of waste to the
- 25 | burning area?

- l A. Yes, sir.
- Q. And what did you do with those barrels when you got
- 3 to the burning area?
- 4 A. We would dump the material into the burning ditch.
- 5 Q. Okay. So you would take the barrel, tip it over
- 6 and pour out the contents?
- 7 A. Dump it, yes, sir.
- 8 Q. And what would you do with the barrel?
- 9 A. Take it back to the building.
- 10 Q. Did you have any -- Strike that.
- Did you clean the barrel in any way before
- 12 | you took it back?
- 13 A. No, sir. Just dump it out, the material out, and
- 14 take the barrels back. And they would re-use the barrels
- 15 to put their waste in.
- 16 Q. Were there any facilities to clean out barrels?
- 17 A. No.
- 18 Q. In the liquid waste barrels was -- were different
- 19 chemicals mixed in those barrels? Do you understand the
- 20 | question?
- In other words, when you went -- Let me go
- 22 back a bit.
- When you went to pick up a barrel of waste
- 24 did employees inside the buildings keep separate,
- 25 different kinds of materials?

- A. They would keep the materials separate, because a lot of them, if they were mixed together, would cause a fire or explosion or something, so they was pretty careful about keeping them separated.
  - Q. And when you picked those materials up you kept them separated, too; is that correct?
- 7 A. Yes, sir.

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- 8 Q. Did you ever mix those materials?
- 9 A. They got mixed one time. We were in a lun-- eating lunch, and (b) (6) and (b) (6) had came by, and they parked the truck out in front of the building.

And somehow the chemicals got mixed together and started a fire on the truck, and we had flares come through the window and everywhere else in the lunchroom, and it burned up several cars out in the parking lot, burned the truck up and everything.

- O. Do you know what was mixed?
- 18 A. No, sir.
- 19 Q. Did anyone ever tell you what was mixed?
- 20 A. The safety man said probably some of the liquids
  21 had turned over and ran together and started the fire.
- 22 Q. Who was the safety man?
- 23 A. (b) (6)
- 24 Q. Did he do -- Strike that.
  - Did  $\frac{(b)(6)}{(b)(6)}$  institute any procedures to

- prevent that from happening again?
- 2 A. Not that I know of.
- 3 Q. Did you ever see any written safety procedures at
- 4 Northrop?
- 5 A. No.
- 6 Q. Did you ever hear about there being any written
- 7 | safety procedures?
- 8 A. No, sir.
- 9 Q. Did you ever see any written emergency procedures?
- 10 A. No, sir.
- 11 Q. Did you ever hear there were any written emergency
- 12 | plans --
- 13 A. No, sir.
- 14 Q. -- or emergency procedures?
- 15 A. No, sir.
- 16 Q. Were there different colors of barrels where waste
- 17 | was stored or put out for -- Let me go back and rephrase
- 18 | the question.
- Were there different colors of barrels for
- 20 | waste that was put outside the buildings?
- 21 A. Yes.
- 22 Q. Do you remember what colors those barrels were?
- 23 A. It had a white -- The white drums were for inert
- 24 | material, like sweepings off the floor and cardboard and
- 25 stuff like that.

The black barrel were what they put their liquids in, and the red barrel was what they put explosive scrap material in.

- Q. Now, when you talk about inert materials, were those -- did those materials have chemicals in them?
- A. Well, they probably had some chemicals in them, but just what they'd sweep up off the floor, clean the building and stuff like that, they'd put in that barrel.
  - Q. Did you ever see any chemicals in the white barrel?
- 10 A. I didn't pay any attention to it.
- 11 Q. Was the white barrel what -- Strike that.

If there was too much material for the white barrel, where would it be put?

A. Well, mostly what the white barrel was for was for just small stuff like that, you know, so it hardly ever ran over anything. They had big trash bins out there where they would put the big, bulky stuff, just throw it out into the trash bin.

And the drums were just for smaller stuff, like when they'd sweep up and put the stuff in those barrels.

And the black barrel, like I say, was for loose chemicals. And the red barrel was for explosive material, like ignition disks, ejection disks and stuff like that.

- 1 Q. Now, let's focus on the red barrel for a minute.
- 2 A. Okay.
- 3 Q. Did you -- Do you have personal experience of
- 4 picking up waste out of the red barrel? In other words,
- 5 did you from time to time get materials out of red barrels
- 6. and dispose of it?
- 7 A. Yeah. We would just dump -- dump the barrel out
- 8 | into the burning ditch.
- 9 Q. Okay. So you would pick the barrel up physically
- 10 and take it up to the burning ditch; is that correct?
- 11 A. Put it on the truck and take it up and just take it
- off the truck, dump it into the burning ditch, is the way
- 13 | we got rid of it.
- 14 Q. And did you do the same for the black barrel?
- 15 A. Yes, sir.
- 16 Q. Did you ever find explosives in the white barrel?
- 17 A. I never did pay any attention to it.
- 18 Q. I think you used the term "inert waste"; is that
- 19 | correct?
- 20 A. Yes, sir.
- 21 Q. What was your understanding of the word "inert"?
- 22 A. Just non-hazardous material.
- 23 Q. Was that used around Northrop? In other words, was
- 24 that term in common use?
- 25 A. Inert?

- 1 Q. Yes.
- 2 A. Yes, sir.
- 3 Q. And that was what everybody called it; is that
- 4 | correct?
- 5 A. Yes, sir.
- 6 Q. Did you typically take the inert waste up to the
- 7 | burning ground?
- 8 A. Yes. We would dump it all in the burning ditch.
- 9 Q. Okay. So the fact that it was separated outside
- lo each building didn't mean it didn't go to the burning
- ll ditch; is that correct?
- 12 A. No. It didn't mean it went to a different place.
- 13 It all went to the same place and dumped in the same
- 14 ditch.
- 15 Q. Did you pick up discarded clothing or protective
- 16 | equipment?
- 17 A. Contaminated material?
- 18 0. Yes.
- 19 A. Yes, sir.
- Q. Where was that put?
- 21 A. Into the burning ditch.
- 22 Q. Okay. In terms of being put outside the buildings,
- 23 | where would those materials be put?
- 24 A. Into the trash bin.
- 25 Q. Okay. So they would be considered to be inert; is

1 that correct? 2 Yes, sir. So from your standpoint and everybody else's, they 3 understood that contaminated clothing was inert? 5 Α. Inert, yes, sir. Do you know if contaminated clothing was treated in 6 0. 7 any fashion before it was put in the trash bin? No, sir. Α. 8 Excuse me. Off the record. 9 MR. SEIFE: 10 (Discussion off the record.) 11 There may have been some MR. SEIFE: 12 confusion, so that you understand, the material --MR. WHEELER: Go ahead and read the record 13 14 back. I mean, let's just hear the question and answer. (The record was read by the reporter.) 15 16 MR. SEIFE: I am not sure if he knew it wasn't treated or that he doesn't know if it was or was 1.7 18 not treated. 19 MR. WHEELER: That is a good point. 20 In other words, you don't know whether the clothing Q. 21 was treated; is that correct? No. It wasn't treated. I know for a fact it 22 Α. 23 wasn't treated.

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24

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Q.

Α.

Well, for one reason, when they called from down at

How do you know that?

- 1 the office about contamination clothing that me and my
- 2 partner was wearing, they said, "Get rid of it," so we
- 3 pulled our clothes off, our shoes off, put them in a
- 4 plastic bag, and they were sent to the burning ground.
- 5 That's the way all materials were took to the burning
- 6 | ground, just like it was. It wasn't treated or anything,
- 7 just put in bags or drums, and we took it straight to the
- 8 burning ground.
- 9 Q. Do you know if the chemicals that were put out as
- 10 | waste were treated?
- 11 A. Yes, sir. They was not treated.
- 12 Q. Were any kinds of chemicals treated, to your
- 13 knowledge?
- 14 A. No.
- 15 Q. Did you see people put chemicals out into the
- 16 barrels?
- 17 A. Oh, yeah.
- 18 Q. Was that a fairly constant thing?
- 19 A. It was constant. I mean, when they were working on
- 20 these various programs, the leftovers and the rejected
- 21 | material was put into the trash, and we would take it to
- 22 | the burning ground and dump it into the burning ditch.
- Q. Did you ever see the material taken from inside the
- 24 | building out to the waste areas?
- 25 A. Oh, yeah.

- Q. How about -- Did you see it actually being qenerated inside the building?
- 3 A. You mean --
- 4 Q. In other words, what I want to do is to ask you how
- far you can trace back this material. I mean, did you see
- 6 | it -- For example, did you see material that would be a
- 7 | bad batch or something come off of the assembly line?
- 8 A. I didn't actually see it coming off the assembly
- 9 line, but the rejected material would be set to one side,
- 10 and we would come and load it into the truck and take it
- 11 to the burning ground.
- 12 Q. Okay. So it would be set to one side inside the
- 13 building; is that correct?
- 14 A. Yes, sir.
- 15 Q. And you would go into the building to pick it up;
- 16 is that correct?
- 17 A. Into the building and bring it out on handtrucks or
- 18 push-- We had carts where they would stack the Mark 24
- 19 | flares onto them. We would roll them out to the truck and
- 20 stack them on the truck and take them to the burning
- 21 ground and throw them into the ditch.
- 22 Q. Did you ever do that with CS?
- 23 A. Yes.
- Q. You went into the building to pick up CS; is that
- 25 | correct?

- 1 A. Yes.
- 2 Q. Had the CS been treated in any way that you could
- 3 | tell?
- 4 A. No. It wasn't treated.
- 5 Q. How do you know it wasn't treated?
- 6 A. Because we would see it come right out of the room
- 7 | where they were packaging it and all and put it in the
- 8 | containers to be thrown away.
- 9 Q. So you would see somebody carry it out of the
- 10 packaging room; is that correct?
- 11 A. Yes, sir, and put it into the drums, and we would
- 12 | haul it away. A lot of the drums would have -- just have
- 13 big blocks of CS where it would get wet and just block
- 14 together. The CS was powder. A lot of it would get wet
- 15 when it would sit out in the weather and rain and stuff.
- 16 It would harden in there and be big clunks.
- 17 Q. Would it be wet in the building?
- 18 A. No.
- 19 Q. Do you know of any treatment that was ever done to
- 20 | any CS before it was disposed of?
- 21 A. No.
- Q. Have you ever talked to anyone about any treatment
- of CS before it was disposed of?
- 24 A. No, sir.
- 25 Q. Did you ever have any -- Strike that.

- Did you ever dispose of any BZ waste?
- 2 A. Just when they cleaned 113, the Building 113 out,
- 3 to work on CS-2. They run into some contaminated material
- 4 | with BZ.
- 5 Q. How did you know the material was contaminated?
- 6 A. When they called us up to haul it away they said it
- 7 | was contaminated BZ material.
- 8 Q. Now, who was it who called up?
- 9 A. I don't remember.
- 10 Q. Did they call you, or did they call your
- ll | supervisor?
- 12 A. They just called down where we were at to pick up
- 13 the material and dispose of it.
- 14 Q. Did you talk to whoever it was directly?
- 15 A. No. We just went up to pick it up, and they showed
- l6 us what to get -- it was in plastic, big heavy plastic
- bags taped up -- and told us to take it to the burning
- 18 ground and dispose of it.
- 19 Q. Do you remember who it was who showed you the
- 20 | materials?
- 21 A. No, sir. One of the foremens that worked there.
- 22 Q. You do know he was a foreman, though?
- 23 A. Yes.
- 24 Q. Who was with you?
- 25 A. (b) (6

- Q. Did you and I take the bags up to the burning ground?
  - A. We took them up to the burning ground and throwed them off into the burning ditch and noticed that one of the bags was ripped, and (b)(6) told me later on, he said, "Did you know you was acting kind of funny? Did you get some of that BZ on you?"

And I said, "No."

And he said to me, "You act kind of strange there for a while." He said, "You ought to go see the nurse."

I said, "I am not going to go see the nurse because she will -- they will lock me up in the room for" -- If you got BZ on you, they'd keep you in a padded cell for five days.

- Q. But you don't have any personal recollection --
- 17 A. No.

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- 18 Q. -- of having any problem with BZ?
- 19 A. No. No, sir.
- Q. How did you know that you would be locked up in a padded room?
- A. Well, I had seen a couple that had got contaminated with BZ. They would put them in the room.
- 24 Q. Who were those people?
- 25 A. was one, and I think I am

- 1 | not for sure what his name was.
- Q. Do you remember the circumstances of their exposure
- 3 to B2?
- 4 A. What do you mean?
- Q. Well, you said that you know they were put into the
- 6 room. Did you see them put into this room?
- 7 A. I seen them in the room, yes, sir.
- 8 Q. What sort of room was it?
- 9 A. It was just a room, a small room, and it had padded
- 10 | walls.
- 11 Q. Why -- Strike that.
- What was the occasion of your being able to
- 13 | see them in the room?
- 14 A. Well, I walked right by there. It was next to the
- 15 | nurse's station.
- 16 Q. Did you go down there specifically to see that
- 17 room?
- 18 A. No, no.
- 19 Q. What building was the nurse's station in?
- 20 A. 128.
- 21 Q. Did you have a maintenance building which was kind
- 22 of your headquarters?
- 23 A. We had a -- Building 139 was our main headquarters,
- 24 | where it was a warehouse, where we had all the material to
- 25 take to the buildings, like gloves, screwdrivers and drums

- and boxes and all kind of things that the different buildings would need. We had all the materials stored in 3 139.
  - O. Is -- Strike that.

When you would receive a call to come do something or go do something, would it come to Building 139?

8 A. Yes, sir.

- 9 Q. And that was the common practice at Northrop?
- A. Yes. We had dispatchers in 139. They would go
  around and check on the buildings and see what they needed
  and write the -- write down what they needed, and they'd
  come down to 139, post it on the board or tell one of us
- 14 what they needed and give us the list. We would go
- through the warehouse and gather it up, put it on the
- 16 truck and deliver it to the buildings.
- 17 Q. Now, I believe you have testified that you can't recall all of the chemical wastes that were disposed of;
  19 is that correct?
- 20 A. Yes, sir.
- 21 MR. WHEELER: Let's just stop and go off the 22 record for one minute.
- MR. WHEELER: It's 11:10 a.m.
- 24 (Discussion off the record.)
- MR. WHEELER: It is 11:13 a.m. We are back

1. . . on the record. I would like to have marked as (b)(6) 2 Exhibit 1 for identification only four pages which I will 3 represent come from the FOIA file on the Chemtronics site 5 kept at Warren Wilson College that are called "PRODUCTION Records, and I would just like (b) (6) 6 to look at 7 these four pages to see if it refreshes his recollection 8 as to other waste chemicals that he disposed of while he 9 was working at Northrop. 10 THE WITNESS: Yes, sir. 11 (Copy of a four-page document entitled "Production Records" was marked (b) (6) 12 Exhibit No. 1 for identification.) 13 14 MR. WHEELER: Why don't you take your time? 15 If you need a piece of paper to write down some names --16 just whatever is best from your standpoint. 17 Would you like to go off the record for a 18 couple of minutes? Would that be helpful? MR. WARREN: I think it might be, just while 19 20 he goes through this. 21 MR. WHEELER: Why don't we go off the record, 22 if that is agreeable to Mr. Warner. 23 Can we go off the record while he looks at it

MR. WARNER: I have no objection.

for a couple of minutes?

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MR. WHEELER: It is 11:14 a.m. now. 1 2 (Recess.) 3 MR. WHEELER: It is now 11:34 a.m. We are 4 back on the record. I would, first of all, like to have the 5 original of the document which (b) (6) has been 6 writing on marked as (b)(6) Exhibit 2 for identification. 7 8 MR. WARREN: Okay. It is stapled together with Page 3, 4 and then 1 and 2 are underneath. 9. MR. WHEELER: Let's put it back in the 10 11 original order, if that is okay. 12 MR. GOLD: Do you have all the pages? MR. WARNER: I have them all. 13 Did you say (b) (6) 14 Exhibit 2? MR. WHEELER: Yes. 15 16 (Copy of a four-page document entitled "Production Records" with (0) (6) s handwritten 17 notations was marked (b) (6) Exhibit No. 2 for 18 19 identification.) MR. WHEELER: Okay. Back on the record. 20 21 Q. You have before you the original of Exhibit 2; is 22 that correct, (b) (6) 23. . . Α. Yes, sir. Now, when you looked at Exhibit 2 did it refresh 24 25 your recollection as to some of the chemicals that you

- l worked with?
- 2 A. Yes, sir.
- Q. Did you put circles around those chemicals, the
- 4 name of those chemicals?
- 5 A. Yes.
- 6 Q. And that includes some chemicals, does it not, that
- 7 | you previously remembered working with; is that correct?
- 8 A. Some I can remember working with. Some I am not
- 9 quite sure. The names seem familiar, but a lot of them I
- 10 am pretty -- I am sure I worked with, and then some I am
- ll | not sure.
- 12 Q. Can you separate out for me the ones that you are
- 13 | not sure about?
- MR. WARNER: Objection: no foundation;
- leading; calls for a conclusion; misleading and ambiguous.
- The term "work with" has never been defined.
- 17 Q. (By Mr. Wheeler) Well, with all that, I think I
- 18 | will just go back and ask you again. Can you tell me from
- 19 this list what chemicals you are not sure that you worked
- 20 | with?
- 21 And that is subject to all of the objections
- 22 that have just been stated.
- MR. WARREN: That he has circled; is that --
- MR. WHEELER: That's right. In other words,
- 25 | the ones he is not sure about that he has circled.

1	THE WITNESS: This
2	MR. WARREN: Use this pen.
3	Q. (By Mr. Wheeler) Are you marking
4	MR. WARREN: Just put a question mark by
5	He is marking on Page 3 "s-t-y-p-h-n-i-c
6	acid."
7	MR. SCHULTHEIS: "Styphnic acid."
8	MR. WARREN: Styphnic. All right.
9	THE WITNESS: I am not sure if this is one.
10	MR. WARREN: That's fine.
11	(Discussion off the record.)
12	MR. WARREN: You can say that out loud. Go
13	ahead and say it again.
14	THE WITNESS: This acid, I am not sure if
15	it's the one they used up at 113 or not. They used acid,
16	but I am not sure of the name of it.
17	MR. COLVIG: What is he referring to there?
18	MR. WARREN: That's Page 3, that same acid
19	that we just spelled.
20	MR. WARNER: Is that Page No. 000538?
21	MR. WARREN: Yes, and with a little "-3-" at
22	the top.
23	On Page 4 he has got a question mark by
24	benzyl chloride, I think is how you pronounce it. It's
25	the name right above ZNC1, sub 2.

- MR. WHEELER: Oh, I see. There is already a question mark beside it; is that correct?
- MR. WARREN: That's correct.
- 4 Q. (By Mr. Wheeler) Anything else?
- 5 A. That's about it.
- 6 Q. Now, with respect to this list of chemicals that
- 7 | you have circled, can you tell me what your -- what this
- 8 list represents to you?
- 9 A. Well, it's mostly the material they used to build
- 10 | the programs we were working on.
- 11 Q. Do you remember making deliveries of these
- 12 | chemicals?
- 13 A. Yes, sir.
- 14 Q. Do you remember -- Strike that.
- Were any of the chemicals that you have
- l6 | circled waste products that you disposed of?
- 17 A. Yes, sir.
- 18 Q. Can you go through this list and tell me which of
- 19 these chemicals were waste products that you disposed of?
- 20 And take your time about it. Why don't we do this --
- MR. WARREN: He is starting on Page 2 at the
- 22 first circle.
- Q. (By Mr. Wheeler) Okay. Can you put a "W" beside
- 24 | each chemical which you recall disposing of as a waste
- 25 | product?

And why don't we go off the record, take your 1 2 time, and then we will go on the record when you are done. Is that agreeable with everybody? 3 MR. WARREN: I think he can go down through 4 it on the record. I think it would probably save some 5 time if we just go -- Everybody has got copies, so --6 7 MR. WHEELER: If he could just read off the chemical name as he does it. 8 9 THE WITNESS: Well, this DATB, it is finished 10 product, but it had a lot of chemicals in it, but there 11 was a lot of scrap material in it we would discard. MR. WARREN: 12 Okay. 13 THE WITNESS: The CS, tetryl pellets, RDX pellets, raytheon pellets, DATB and PBX, sodium nitrate --14 15 MR. WARREN: So could you clarify what he 16 is -- He is explaining this, but I am not sure he is 17 giving you the information you have asked him for. 18 Could you make sure he understands what he is 19 doing as he goes down this list? 20 MR. WHEELER: Yes, sir. 21 Q. What I would like you to do is break this list 22 You have told us that you worked with these various 23 chemicals. What I want to know is which of these

chemicals did you dispose of as waste products.

Is that understandable?

24

- 1 A. Yes, sir.
- Q. Okay. Is that what you have been doing?
- 3 A. Yes, sir.
- Q. And you are putting a "W" beside each chemical that was disposed of as a waste product; is that correct?
- 6 MR. WARREN: He is now.
- Q. (By Mr. Wheeler) Okay. If I can ask you to do
  that for me, sir, and then when you get caught up if you
  could then start again and just read what you are putting
  a "W" beside and tell me what additional waste products
  you disposed of.
  - MR. WARREN: Okay. Now, as you go down here you put a "W" by --
- THE WITNESS: A-3, that was --
- MR. WARREN: Just speak up so they can follow it.
  - THE WITNESS: This "Stripping of A-3, it had a lot of the chemicals in it, but the A-3 was a finished product. It was an explosive.
- MR. WARREN: And just keep on going.
- Q. (By Mr. Wheeler) But you did dispose of wastes
  from that; is that correct?
- 23 A. Yes, sir.
- MR. WARREN: So the next one you have marked by a "W" is what?

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1	THE WITNESS: PBX synthesis.
2	MR. WARREN: Okay. And the next one is
3	THE WITNESS: DATB, OCBA drums.
4	MR. WARREN: Okay. Do you want to go all the
5	way down and then come back?
6	THE WITNESS: Ethylene
7	MR. WARREN: dichloride?
8	THE WITNESS: Yes, sir.
9	MR. WARREN: Then come back up to under "Raw
10	Materials."
11	He has put a "W" by the whole circle under
12	"Raw Materials" starting "sodium nitrate" and going
13	through
14	THE WITNESS: boron, potassium nitrate,
15	toluene, acetone, methanol, then
16	MR. WARREN: Then cyclohexane?
17	THE WITNESS: hexane, yes, sir.
18	MR. WARREN: Go to the next page and start up
19	here.
20	THE WITNESS: This caustic, cyclohexane,
21	methanol
22	MR. WARREN: I can't pronounce it, but it's
23	tetranitro-carbazol, and I am not sure I am pronouncing
24	it, either.
25	THE WITNESS: I am not sure about that one,

1 but the name sounds familiar, but I am not really sure 2 about that. 3 MR. WARREN: Just put a question mark. 4 (By Mr. Wheeler) And that's tetranitro-carbazol? 0. 5 Yes, sir. Α. 6 Why don't you put a "W" question mark there? Q. 7 Yes, sir. Α. 8 MR. WARREN: Put a "W" in front of it. 9 THE WITNESS: The name sounds familiar, but I 10 can't remember about that one. 11 MR. WARREN: That is that one you have 12 already got a question mark by. 13 Yeah, yeah. THE WITNESS: 74 MR. WARREN: Okay. So just go through --15 THE WITNESS: DATB, PBX, CS, CS, raytheon pellets, distilled acetone, DATB, C-4, C-3, DATB, PBX, 16 17 RDX, silica gel, acetone, toluene, nitric, ammonia --18 MR. WARREN: Cyclohexane? 19 THE WITNESS: Yes. 20 -- and lacquer, RDX, and this EtCL sounds 21 familiar, but I am not for sure. 22 MR. WARREN: Put a "W" and a question mark. 23 THE WITNESS: Acetic, acid, nitric --24 Q. (By Mr. Wheeler) Do you understand those to be 25 various kinds of acids in that list?

1	A. Yes.
2	MR. WARREN: Right here.
3	Q. (By Mr. Wheeler) That is, acetic. Then it says
4	acid. Then it says nitric, chromic, bromine
5	Bromine may not be an acid, but you do
6 ·	understand nitric to be nitric acid?
7	A. Yes, sir.
8	Q. Is that true of chromic, as well?
9	A. Yes, sir.
10	Q. Okay.
11	MR. WARREN: Just keep on going down there.
12	THE WITNESS: I am not sure about the chromic
13	acid.
14	MR. WARREN: Okay. Put a "W."
15	THE WITNESS: Bromine, it sounds familiar,
16	but I am not for sure. And hexachlorine, I am sure I
17	handled that.
18	Q. (By Mr. Wheeler) That's cyclohexane?
19	MR. WARREN: Yes, cyclohexane.
20	MR. WARNER: Is the witness sure or not sure
21	about cyclohexane?
22	MR. WARREN: He is sure.
23	Then on 000539, starting with methanol
24	THE WITNESS: Methanol, solvent, ammonia,
25	sulfuric acid, ammonia, sodium nitrate, acetone

\*)

- l (distilled), ammonia, hexachlorine.
- Q. (By Mr. Wheeler) Is that cyclohexane?
- 3 A. Yeah.
- 4 MR. WARREN: Right, uh-huh.
- 5 THE WITNESS: Methanol, and then this
- 6 bromine, I am not for sure. It just sounds --
- 7 MR. WARREN: Okay. All right.
- 8 THE WITNESS: Nitric acid, I am not sure of
- 9 | that, either.
- 10 Q. (By Mr. Wheeler) Going back to Page 3 for a
- ll moment, I note that there is a reference there to "BZ
- 12 production." It's in "Process" about in the very first
- 13 | block.
- MR. WARREN: Uh-huh.
- 15 A. (By Mr. Wheeler) I believe you previously
- 16 testified that you did dispose of some BZ contaminated
- 17 | materials: is that correct?
- 18 A. Yes, sir.
- 19 Q. Did you just simply inadvertently omit that when
- 20 | you went through it?
- 21 A. Yes, sir.
- Q. Okay. So you are putting a circle there now and
- 23 you would consider that to be a waste product that you
- 24 disposed of?
- 25 A. That was supposed to be a waste product. It was

1 supposed to be inert. 2 MR. WARREN: And a "W." Okay. 3 (By Mr. Wheeler) Now, with respect to the -- this list of waste products, can you do one more thing for me: 4 5 Can you go through and differentiate between solids and liquids? 6 MR. WARREN: Starting on Page 2, again it 7 is -537. 8 (By Mr. Wheeler) Right, just the things that have 9 "W" beside them, and if you could just indicate with an 10 "L" if it is a liquid and an "S" if it is solid. 11 12 I assume you didn't dispose of any gaseous wastes; is that correct? 13 14 I don't understand your question. Α. 15 Okay. As I understand it, there are two kinds of 0. 16 wastes basically. There is solid and then there is 17 liquid. Yes, sir. 18 Α. Could you go through this list and just indicate 19 Q. 20 for me which of these waste are liquid and which of them are solid? 21 22 MR. WARREN: And read it out. 23 Q. (By Mr. Wheeler) And just read it out as you go

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along.

THE WITNESS: DATB, solid. CS, solid.

Tetryl pellets are solid.

2 MR. WARREN: CS-1.

THE WITNESS: CS-1 is solid. RDX pellets are solid. PBX is solid. This sodium nitrate is solid. The A-3 is solid. PBX synthesis, solid. DATB synthesis -- I

- 6 don't -- If that is the finished product, it's solid.
- Q. (By Mr. Wheeler) Let's work on the -- You are working under the assumption, sir, that that refers to
- 9 DATB finished product; is that correct?
- 10 A. Yes, sir.

- 11 Q. Okay. And that is a solid?
- 12 A. It is solid.
- Q. Okay. I want you -- On those, I want you to work
- on the basic assumption you seem to be operating under,
- 15 that those are the finished products.
- 16 A. Yes. OCBA drums, the drums when they are filled,
- 17 | they are liquid.
- 18 Q. So OCBA is a liquid; is that correct?
- 19 A. It's a liquid.
- 20 | Sodium nitrate is solid. Boron is solid.
- 21 Potassium nitrate is solid. Toluene is a liquid. Acetone
- 22 | is a liquid. Methanol is a liquid. Cycloethy--
- 23 Q. (By Mr. Wheeler) -- hexane.
- 24 A. -- hexane is a liquid.
- 25 Q. How about ethylene dichloride?

Silica

1 Ethylene dichloride is a liquid. Α. 2 BZ production -- I wasn't working there when 3 they made the BZ, but the finished product is solid, I 4 know. 5 MR. WARREN: Okay. 6 THE WITNESS: Caustic acid was a liquid. 7 have already said this one. It's a liquid. 8 (By Mr. Wheeler) Cyclohexane? Q. 9 Α. Yes, sir. Methanol, liquid. And this one --10 Q. Tetranitro-carbazol? 11 I am not for sure. I don't -- I can't remember Α. 12 about it. That's fine, sir. 13 Q. 14 MR. WARREN: Okay. 15 THE WITNESS: This synethic [sic] acid, it's 16 a liquid, but I am not sure about it. And all these 17 others down -- DATB, PBX, CS, CS-1, raytheon pellets -- is 18 solid. 19 MR. WARREN: All right. 20 THE WITNESS: Distilled acetone is liquid. 21 MR. WARREN: Let's put an "S" by those. 22 (Discussion off the record.) 23 THE WITNESS: DATB, solid. C-4, solid. C-3,

gel is solid. Acetone is liquid. Toluene is a liquid.

solid. DATB, solid. PBX is solid. RDX, solid.

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- 1 Nitric, ammonia, is liquid. And this cyclohexane is a
- 2 liquid. Lacquer is liquid. RDX, solid. And this E--
- 3 Q. (By Mr. Wheeler) EtCL?
- 4 A. Yeah. I don't know.
- 5 Q. Okay. Question mark.
- 6 MR. WARREN: Okay. And go on down. You are
- 7 | right under here [indicating].
- 8 THE WITNESS: Acid -- I can't remember.
- 9 MR. WARREN: Okay. Skip that one.
- 10 Q. (By Mr. Wheeler) Why don't you tell me what you
- 11 | are skipping?
- 12 A. Acid --
- 13 Q. Acetic?
- 14 A. Acetic.
- 15 Q. Question mark, okay.
- 16 A. The acid was liquid. This nitric was a liquid
- 17 | form, I think. I am not for sure.
- 18 Q. So put an "L," question mark there.
- MR. WARREN: Okay.
- 20 THE WITNESS: And this I don't know.
- MR. WARREN: Chromic?.
- THE WITNESS: Chromic and bornine-- bromine,
- 23 I am not for sure.
- MR. WARREN: Okay. And what about the last
- 25 | one?

1 0. (By Mr. Wheeler) Cyclohexane? 2 Α. Yeah. 3 What is that? 0. That is a liquid. Α. 5 Q. Okay. 6 MR. WARREN: Just put an "L" by it. 7 Now, the last page starting with methanol --8 THE WITNESS: Methanol is a liquid. 9 solvent, I don't -- I reckon that's what the methanol 10 solvent --11 Is that what that means? (By Mr. Wheeler) I have no idea. I have never 12 Q. 13 seen -- I didn't write this. 14 Solvent -- I don't know. Α. 15 Q. Okay. 16 Ammonia was liquid. Sulfuric is liquid. Ammonia, Α. 17 liquid. Sodium nitrate is solid. Acetone is a liquid. 18 Ammonia is a liquid. Hex--19 Cyclohexane? 0. 20 Cyclohexane, liquid. Methanol is liquid. And this 21 bromine, I am not for sure. 22 MR. WARREN: Okay.

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Q.

Α.

MN, yes.

some point as to a chemical called MN; is that correct?

(By Mr. Wheeler) Now, I believe you testified at

- Q. Is that a short name for something on this list that you have seen?
- A. I have not seen the name of it on here, like OCBA.
- Q. Do you know what process generated MN or used MN?
- 5 A. I just know that MN and OCBA was the main
- 6 | components of making CS and CS-2.
- 7 | Q. What -- Strike that.
- 8 | Was MN a liquid or a solid?
- 9 A. It was a liquid. OCBA was a liquid.
- 10 Q. Did you ever dispose of any MN as a waste?
- 11 A. Just when it would get on your clothing and stuff
- 12 like that, or where it was spilled, and they would clean
- 13 | it up with rags and things. We would dispose of it.
- 14 Q. And you would take it out to the burning ground?
- 15 A. Yes, but after Northrop was winding down we
- disposed of a lot of OCBA, buried it in some ditches up on
- 17 | the burning ground.
- 18 Q. Okay. I am going to cover that area a bit later.
- 19 A. Okay.
- 20 Q. Was there a chemical that you dealt with called
- 21 DDM?
- 22 A. DDM, yes, sir.
- Q. Do you know what the initials DDM stand for?
- 24 A. No, sir.
- 25 Q. Do you know what process DDM was used in or was

- l generated by?
- 2 A. No, sir. All I know is we would take it to the
- 3 | buildings and they would mix it with the material.
- 4 Q. Did you ever dispose of DDM as a waste material, to
- 5 | your knowledge?
- 6 A. Yes, sir.
- 7 Q. Was DDM a solid or a liquid?
- 8 A. It was a liquid.
- 9 Q. I believe you have previously testified that you
- 10 also disposed of magnesium; is that correct?
- ll A. Yes, sir.
- 12 Q. What form of magnesium was that, if you know? In
- other words, was it a metal or was it a compound?
- 14 | A. It was a compound powder. It was what they make
- 15 the Mark 4 flares with.
- 16 | O. Was it flammable?
- 17 A. When mixed. When it was completed it was
- 18 | flammable.
- 19 Q. Now, apart from the chemicals which you have
- 20 | circled on this sheet and the chemicals that we have just
- 21 gone over, do you recall any other chemicals first that
- 22 | you worked with?
- 23 A. There was a lot, but I just can't remember the
- 24 names of them now.
- Q. Well, that's my question, sir. Do you remember

- anything at this time beyond what the list shows and what vou have testified to?
- 3 A. No. sir.
- Q. Now, with respect to these waste chemicals that you
- 5 have circled on this list, did you dispose of all of these
- 6 chemicals at the burning ground at one time or another, to
- 7 | your knowledge?
- A. Disposed of them there and various other places,
- 9 too, off--
- 10 Q. Both on and offsite; is that --
- 11 A. Offsite, yes, sir.
- 12 Q. Can you go through this list and tell me which
- chemicals you disposed of offsite?
- 14 A. DATB waste material.
- 15 | Q. Okay. Let's --
- MR. WARREN: If we had another different
- color pen, because we have got blue -- If we had red or
- black or another color, it would help, but he can do -- at
- 19 least on the written he can do an "O."
- 20 MR. WHEELER: I still don't know, because
- 21 | what I want to do is this:
- 22 | Q. As you go through the list, if you would go and
- 23 | circle what's offsite and put "O" beside it. Does that
- 24 make sense?
- 25 A. Okay. This DATB, some waste material would be in

- 1 | the trash. Sodium nitrate --
- 2 MR. SEIFE: May I seek a clarification? If
- 3 | it just has "O," it doesn't necessarily mean it was
- 4 disposed of offsite.
- 5 MR. WHEELER: That's right. I mean, that
- 6 | was --
- 7 Q. Do you understand that, sir?
- 8 A. That offsite --
- 9 Q. This just -- This means it may be disposed of
- 10 on-site. All I am asking you is what you know you took
- 12 A. Yes, sir.
- Q. Okay. You started out with DATB waste or products
- 14 went offsite.
- 15 A. The inert material, like the contaminated rags and
- 16 | stuff like that. CS was dumped offsite. CS-1 and CS-2 --
- 17 They don't have CS-2 on this list here.
- 18 Q. You do recall CS-2 being a waste product, however?
- 19 A. Yes. We made CS-1, and the CS-2 was the
- 20 | waterproof. It was entirely different than this CS-1. It
- 21 | is not on here.
- 22 Q. Excuse me, sir. Was CS-2 a solid?
- 23 A. Yes, sir.
- 24 Q. Okay. Let's keep going down the list, then.
- 25 A. CS-1 was dumped offsite. CS-2 was dumped offsite.

1	OCBA, offsite, contaminated material. Sodium nitrate was
2	dumped offsite; boron, potassium nitrate, toluene,
3	acetone, methanol. And this one I don't remember.
4	Q. You don't remember cyclohexane; is that correct?
5	A. No.
6	Q. Okay.
7	MR. WARREN: Ethylene
8	THE WITNESS: Ethylene dichloride, it was
9	dumped offsite.
10	MR. COLVIG: Can I interpose a question?
11	(b)(6) when you say these were dumped
12	offsite, are you only speaking of contaminated materials
13	that had these things on them?
14	THE WITNESS: It was contaminated material,
15	and then a lot of Like this potassium nitrate, it came
16	in drums, fiber drums. What was left in the drum like
17	would be maybe some that was left in the drums. The drum
18	and the sodium all was thrown off.
19	MR. COLVIG: Okay. Maybe when you go through
20	the list from now on, tell us in what form it was taken
21	offsite
22	THE WITNESS: Okay.
23	MR. COLVIG: so we can know how that
24	happened.
25	MR. WARREN: We are up here.

1	THE WITNESS: Methanol was dumped offsite,
2	but it was only contaminated rags, material where they
3	would clean. They cleaned with methanol. This is just
4	contaminated rags and stuff.
5	. CS was dumped offsite.
6	MR. COLVIG: You said "this." What are you
7	referring to then?
8	MR. WARREN: That methanol.
9	MR. COLVIG: Okay.
10	THE WITNESS: Methanol.
11	Acetone
12	MR. GOLD: Excuse me. You said CS was dumped
13	offsite. In what form?
14	THE WITNESS: In a powder form.
15	MR. GOLD: In the powder form?
16	THE WITNESS: Yes, sir.
17	Q. (By Mr. Wheeler) Now, you said acetone was the
18	next one.
19	A. Acetone, yes. They cleaned material with acetone.
20	It was a cleaning material, mostly. They also used it to
21	mix with explosives, but the contaminated rags and things
22	like that was dumped offsite.
23	Silica gel was dumped offsite. That is a
24	powder.
25	Toluene, I don't remember.

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Excuse me. You don't remember if
 1
                   MR. SEIFE:
 2
      it was dumped offsite or what form?
                                 I don't remember if we dumped
                   THE WITNESS:
 3
      any of it offsite or anything, but it was -- It was a
 5
      liquid form, but I don't remember.
 6
                   MR. GOLD: We are on Page 3 on the right
 7
      column under RDX.
 8
                   THE WITNESS:
                                 Yes.
                                        That's all.
 9
                   MR. WARREN:
                                You go down that way.
10
                                 There isn't anything different.
                   THE WITNESS:
11
                   MR. WARREN:
                                Okay. We are on the fourth
12
      page, starting with methanol.
13
                   THE WITNESS:
                                 Methanol, the contaminated
14
      material, the cloth, rags and things were dumped offsite.
15
                   Sodium nitrate, we would dump it offsite.
16
      0.
             (By Mr. Wheeler) In what form, sir?
17
             It would be what was left in the drums, the fiber
18
            It came in fiber drums.
                                       There would be some that
19
      would be left in the drums. It would be dumped off with
20
      the drums.
                  That's about it.
21
             I have just a couple more questions and I think we
22
      will take a lunch break.
23
                   My first question is, do you have personal
24
      knowledge that these materials were dumped offsite?
25
      Α.
             Yes, sir.
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- Q. And you were along when those materials were dumped?
- A. I was -- I was with (b) (6) when we would take it off and dump it.
  - Q. And that's (b) (b); is that right?
- 6 A. (b) (6) yes, sir.

14

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7 Q. Did you rec-- Strike that.

Were you able to recognize these chemicals

when you took them offsite? In other words, how did you

know that these chemicals were either in their raw form or

- ll contaminating something when you took them offsite?
- 12 A. Well, they would be in the fiber drums, and it
  13 would be marked what it was, sodium nitrate or the --
  - Like the toluene, you could smell it. You could tell what it was by the smell.
- 16 Q. So you knew what toluene was?
- 17 A. Acetone, you could smell the acetone. You knew
  18 what it was. We didn't take the drums off and pour the
  19 material out of the drums.
- Q. The material was just in the container; is that correct?
- 22 A. Yes, sir.
- 23 Q. Okay.
- A. The sodium nitrate, boron, potassium nitrate, all this came in fiber drums, so we would take them off with

- 1 the cardboard and other stuff.
- The other, like the toluene, acetone,
- 3 methanol and the cyclohexane, were liquid. They came in
- 4 | metal drums. They were took up on the mountain and
- 5 | throwed over the side of the mountain.
- 6 Q. Now, was that offsite or on-site, as far as you
- 7 | were concerned?
- 8 A. On-site.
- 9 Q. Okay. I am just interested in offsite now.
- MR. WARREN: So could you repeat the question
- 11 that you are interested in right now?
- MR. WHEELER: Yes, sir.
- 13 Q. What I am interested in is simply how you knew that
- 14 the various materials that you have testified that you
- 15 took offsite are, in fact, included in the waste that you
- 16 took offsite.
- 17 | A. Well, I --
- 18 Q. You have already testified as to certain of them.
- 19 | I think you have pretty well covered it, to be quite
- 20 honest.
- 21 A. Yes, sir.
- 22 Q. I guess I would just -- and I think you previously
- 23 testified, for example, that CS was a powder that was in
- 24 | the cardboard and things like that; is that correct?
- 25 A. It was in the CS bags. Some of them would be

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- bursted open. They would try to put the -- The ones that
  would burst open, they would try to put all of it back in
  the hopper and re-use it, but the contaminated bags would
  still have a lot of CS in it.
- 5 Q. And you took that offsite?
- 6 A. They were took offsite and dumped.
- 7 Q. You personally took them offsite; is that correct?
  - A. I was with  $\binom{(b)(6)}{(b)}$  when we would take them offsite.
- 9 Q. And that was (b) b) (6)
- 10 A. (b) (6)
- The silica gel, it was a powder. It was taken offsite.
- 13 Q. How did you know that it was silica gel?
- 14 A. It was on the bags -- The name of it was on the
- bags, and also you could tell. It was a real fine powder.
- 16 It was almost like -- If the bag was to burst or anything,
- 17 | it was not like a powder. It was just like smoke, it was
- 18 so fine.

- 19 Q. So you would dispose of the bags in which the
- 20 | silica gel had come; is that correct?
- 21 A. Yes, sir.
- Q. And those bags would still contain residue; is that
- 23 | correct?
- 24 A. Yes, sir.
- MR. WHEELER: I think that's sufficient for

It is now 12:13, and I suggest that we 2 adjourn for lunch. Would you feel better, (b) (6) tο 3 have about a two-hour break and come back around 2:15, 4 5 sir? That will be all right. 6 THE WITNESS: Yes. MR. WHEELER: Okay. Is that agreeable to 7 everybody in the room? 8 9 MR. WARNER: Certainly. MR. WHEELER: Okay. Then why don't we 10 11 adjourn until 2:15. (At 12:13 p.m. a noon recess was taken until 12 2:15 p.m. of the same day.) 13 MR. WHEELER: Let's go back on the record. 14 It is 2:15. Mr. Colvig did not come back yet, but I think 15 16 he will be here in a minute or two, so let's go ahead and get started. 17 Do you understand you are still under oath, 18 0. 19 20 Α. Yes. 21 0. did you ever dispose of magnesium (b) (6) offsite? 22 Probably. It was probably mixed in with the other 23 Α. 24 material. It was probably swept up off the floors.

our purposes.

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But you don't know for certain; is that correct?

- In other words, you say probably. You are just making an after-the-fact assumption; is that correct?
- A. Well, when they would put it in the press a lot of
- 4 it was spilled on the floors. They'd sweep it up and put
- 5 | it in the trash, so more than likely, 99 percent, would be
- 6 that some of it was dumped in with the other stuff.
- 7 Q. Okay. So you saw the scraps on the floor?
- 8 A. Yes, sir.
- 9 Q. Did you see it being swept up?
- 10 A. Yes, sir.
- 11 Q. And did you ever see the scraps being put in the
- 12 | trash?
- 13 A. Yes, sir.
- 14 Q. You just don't specifically recall now seeing
- 15 | scraps of magnesium in trash you took offsite; is that
- 16 | correct?
- 17 | A. No, sir.
- 18 | O. You don't recall?
- 19 A. No, sir.
- 20 Q. Okay. Was -- Strike that.
- 21 Did you dispose of MN offsite?
- 22 | A. Probably like we did with the OCBA-contaminated
- 23 | material, where it would be spilled on the floor and
- 24 | cleaned up with rags and hosed down, and we would haul the
- 25 | rags and the stuff they cleaned the MN up with, probably,

- is the only way. We didn't take it out in the drums and
- 2 pour it out.
- 3 Q. Okay. So it would just be contaminated rags and
- 4 | the like?
- 5 A. Yes, sir.
- 6 Q. Did you dispose of DDM offsite?
- 7 A. No. We didn't dispose of it offsite -- Well, it
- 8 | went offsite.
- 9 Q. How did it go offsite?
- 10 A. Well, we took it into this Building 112 and poured
- 11 it down the drain. It went out the drain and into the
- 12 creek, and the creek ran into the river, so that was
- 13 | considered offsite, in my opinion.
- 14 Q. When you say "we," who are you referring to?
- 15 A. (b) (6)
- 16 Q. Can you tell me when this occurred?
- 17 A. Not the exact date.
- 18 Q. Can you tell me the year, approximately?
- 19 A. '66, '67, '68.
- 20 Q. Can you describe for me how this came about, going
- 21 into this building and pouring something down the drain?
- 22 A. The expiration date ran out.
- 23 Q. On what?
- 24 A. On the DDM, and they couldn't use it, weren't
- 25 supposed to use it, so we took it into this building,

- opened it up, the containers, and poured it into the drain.
- 3 Q. Do you know where the drain went?
- 4 A. Yes, sir. It went into the creek that runs down
- 5 into a -- Bee Tree Creek. The creek that it ran into came
- 6 down right in front of Building 128, ran all the way
- 7 through the Northrop property down into Bee Tree Creek.
- 8 Q. Now, who told you, if anyone, to go dispose of the
- 9 DDM?
- 10 A. Our supervisors.
- 11 Q. And who was that?
- 12 A. (b) (6) or -- (b) (6)
- 13 Q. Okay. Do you specifically recall it was
- 14 (b) (6) that told you to dispose of the DDM?
- 15 A. Well, he would tell -- Let's see. Mr. Shook was
- 16 | the foreman over us. He would tell Shook, and Shook would
- 17 | tell us to go get rid of the stuff.
- 18 Q. Now, do you remember Mr. Shook telling you to --
- 19 A. Yes, sir.
- 20 Q. Do you know where Mr. -- Strike that.
- 21 Is Mr. Shook still alive?
- 22 A. No, sir.
- 23 Q. Do you know when he died?
- 24 A. I think it was in 1969 or '70. I am not -- '69, I
- 25 | believe it was. He was killed in an acci-- a hunting

- l accident.
- Q. Did you pour anything besides DDM down the drain in
- 3 Building 112 on that occasion?
- 4 A. Yes, sir. Toluene and methanol. That's all I can
- 5 remember.
- 6 Q. Were you told specifically what to do with the
- 7 expired chemicals?
- 8 A. Just to get rid of it.
- 9 Q. Did you consider taking the chemicals somewhere
- 10 else to dispose of them?
- ll A. No, sir.
- 12 Q. Why not?
- 13 A. That was the easiest way to get rid of it, just
- 14 pour it in the floor, and it would all run down into the
- 15 drain.
- 16 Q. Did -- Mr. Shook knew that you did that?
- 17 A. Yes, sir.
- 18 Q. How do you know he knew?
- 19 A. Well, he seen us load it up and take it up to the
- 20 building.
- 21 Q. Where was the material being kept before you took
- 22 | it to the building?
- 23 A. The DDM was kept in various places in little
- 24 storage sheds.
- 25 O. How about the toluene?

- A. The toluene, some of it was on the loading dock up
- 2 at 112, and it was in different places, also.
- 3 Q. How do you know that the materials went into the
- 4 creek?
- 5 A. That's the only place they could go. It wasn't
- 6 | tied into the sewer system. It was just a drain that ran
- 7 out into the creek.
- 8 Q. How do you know that?
- 9 A. Well, you could see where it went to.
- 10 Q. What did you see?
- 11 A. Well, when they would dump this material, like when
- 12 they were making PBX, it was yellow. And when they would
- 13 | run it through the centrifuge up at 113 they would dispose
- of the liquid. It would run down through the creek. You
- 15 | could smell it. You could also see it. The creek would
- 16 turn yellow.
- 17 Q. Now, I believe you testified that you dumped the
- 18 | toluene and the DDM in Building 112; is that correct?
- 19 A. Yes, sir.
- 20 Q. How do you know the drain from Building 112 went
- 21 into the creek?
- 22 A. We have seen stuff coming out of there -- out of,
- 23 | into the creek. You could smell it. You can smell
- 24 | toluene and --
- 25 Q. DDM?

- 1 A. Well, DDM, you couldn't smell it too much, but
  2 toluene, you could smell it, and --
- What is the other one that I said was up in
- 4 there?
- 5 Q. Methanol.
- 6 A. Methanol. They have a real strong odor.
- 7 Q. Now, do you recall smelling those chemicals on that
- 8 occasion?
- 9 A. Yes, sir.
- 10 Q. And you went down by the creek; is that correct?
- 11 A. Yes, sir.
- 12 Q. Did anyone ever -- Strike that.
- Do you recall on any other occasion seeing
- 14 | chemicals in the creek other than what you have just
- 15 | described?
- 16 A. Yes, sir, all the time.
- 17 Q. Can you -- Strike that.
- 18 Were there -- Was the creek discolored?
- 19 A. Yes, sir.
- 20 Q. Could you tell from the discoloration what
- 21 | chemicals were in the creek?
- 22 A. Yes, sir.
- 23 Q. Can you tell me what chemicals were in the creek
- 24 | besides the DDM, the toluene, the methanol and the PBX
- 25 | which you have just described?

- A. By the smell you could tell, but the PBX, it was -you could tell more about it because it would turn the
- 3 water yellow, but the other, it had a real strong odor.
- 4 Q. Did anyone else ever say anything to you about the
- 5 | creek smelling?
- 6 A. Just about everybody that worked there complained
- 7 about it.
- 8 Q. Did they complain to you?
- 9 A. They didn't complain to me. I didn't have no
- 10 say-so over it.
- 11 Q. Did you ever hear anyone in Building 128 complain
- 12 about the creek?
- 13 A. They would all, you know, talk about it and joke
- l4 and go on about it, but they didn't complain. They knowed
- 15 | that was where they was making their living, so I don't
- 16 | think they cared.
- 17 | Q. Now, Building 128 was the administration building;
- 18 | is that correct?

- 19 A. For up on the hill. The main administration
- 20 | building was down below in Building 101.
- 21 Q. Now, who was located in Building 128?
- 22 A. (b) (6) He was (b) (6)
- 23 | supervisor and had the quality control and the nurse's
- 24 | station, the laundry and the showers.
- 25 Q. Did you ever hear (b) (6) talk about the creek?

- 1 A. Oh, I have heared him talk about it and all, but
- 2 they didn't complain. I mean it was just jokes. When it
- 3 was stinking they would talk and go on about it.
- 4 Q. And you specifically remember (6) (6) talking
- 5 about when the creek stank?
- 6 A. Oh, yeah. All of them did.
- 7 Q. How about (b) (6) ? Did he talk about it?
- B A. Yes, sir.
- 9 Q. Did the nurse talk about it?
- 10 A. Oh, yeah.
- 11 O. Who else?
- 12 A. And (b) (6) secretary, (b) (6) she
- 13 | complained about the creek stinking -- About all of them
- 14 | complained about it stinking, but that's -- They made
- 15 their money off of it. They was nothing they was wanting
- 16 to do about it.
- 17 Q. Did you know what (b)(6) title was at that
- 18 | time?
- 19 A. He was supervisor over manufacturing up on the
- 20 | hill.
- 21 Q. Do you know who his superior was?
- 22 A. Not unless it was (b) (6)
- 23 Q. Did you ever work with cynanide?
- 24 A. I can't remember if we handled cynanide or not, but
- I know they made it there, but I don't know -- remember

- l handling it.
- 2 Q. Did you ever work with cobalt?
- 3 A. Yes, sir.
- 4 Q. Did -- Was that the metal cobalt, to your
- 5 knowledge?
- 6 A. It was the powder.
- 7 Q. You don't know what compound it was?
- 8 A. No, sir.
- 9 Q. Did you deliver cobalt to -- for processing?
- 10 A. In the powder form.
- 11 Q. Was cobalt a waste product that you handled?
- 12 A. It was a chemical they mixed with other -- with
- 13 | chemicals.
- 14 Q. Do you know whether it was included in the waste
- 15 | that you were handling?
- 16 A. It probably was, because what was left over would
- 17 be thrown away in the trash.
- 18 Q. But you don't specifically know --
- 19 A. No, sir.
- 20 Q. Did (6) (6) ever accompany you in delivering
- 21 product or delivering -- Let me start over again.
- Did (b) (6) ever accompany you when you
- 23 delivered materials?
- 24 A. I can't remember. He was probably at some of the
- various buildings when we would deliver stuff, but he

- didn't get in the truck and go with us or anything like that.
- 3 O. Was (b) (6) ever with you when you made
- 4 deliveries to the CS production area?
- 5 A. Not that I know of. I mean, if they could stay
- 6 away from it, they didn't go around it.
- 7 Q. And when you say "they," who are you referring to?
- 8 A. The bigger fish, bigger fishes.
- 9 Q. Can you specify by name who those were?
- 10 A. (b)(6) and all of them down below.
- 11 Q. Did (6) (6) ever accompany you while you were
- 12 | making deliveries?
- 13 A. No, sir.
- Q. Did (6) (6) ever accompany you when you picked
- 15 up waste?
- 16 A. No, he never did accompany us.
- MR. WARREN: Clarify accompany, please.
- THE WITNESS: You mean go with me?
- 19 Q. (By Mr. Wheeler) Go with you to make sure it was
- 20 done.
- 21 A. No.
- 22 Q. How about (6) (6)
- 23 A. No.
- 24 Q. Did anyone else you would characterize as a big
- 25 | fish ever accompany you when you were making a delivery?

- 1 A. No.
- 2 Q. How about accompany you when you were picking up
- 3 waste?
- 4 A. No.
- 5 Q. Who were the safety officers at the plant while you
- 6 were with Northrop?
- 7 A. (b) (6) was over the Safety Department.
- 8 Q. Where were his offices?
- 9 A. Down in 101.
- 10 Q. Was (b) (6) ever present when you delivered
- 11 | materials to production areas?
- 12 A. Not to my knowledge or recognition.
- Q. Was (b) (6) ever present when you were picking up
- 14 waste for disposal?
- 15 A. No, sir.
- 16 Q. Was (b) (6) also a safety officer?
- 17 A. Yes, sir.
- 18 Q. Was (b) (6) ever present when you made
- 19 deliveries to the production areas?
- 20 A. Yeah. He would come around and check on the
- 21 | buildings and the weight limits and all that. Sometimes
- 22 he would come into the buildings while we were there
- 23 | loading and unloading material. He always seen that the
- 24 | buildings were kept at their regular limit, not be
- 25 | overloaded with explosives and stuff like that.

- 1 Q. Did you talk to him when he came to visit?
- 2 A. I used to talk to  $\binom{b}{6}$  a lot.
- 3 Q. Did you talk to him about what you were doing?
- 4 A. No.
- 5 Q. Did you just pass the time with him?
- 6 A. Just passing the time.
- Q. Was (b) (6) ever present when you were picking
- 8 | up waste?
- 9 A. Probably. I can't remember, though. We seen a lot
- 10 of him around the area.
- 11 Q. I believe you have testified that the waste
- 12 disposal operation expanded as time went by; is that
- 13 | correct?
- 14 A. Yes, sir.
- 15 Q. Were more employees added to that area or worked in
- 16 that area as time went by?
- 17 A. You mean handling the waste material?
- 18 Q. Yes, in addition to (b)(6) and Mr. --
- 19 A. (b)
- 20 Q. (b) (6)
- 21 A. No, sir.
- 22 Q. How about materials handlers? Were there more
- 23 | material handlers as time went by?
- 24 A. No. We always kept about the same.
- 25 Q. When -- Strike that.

- Did (b)(6) and (b)(6) in your experience devote their time exclusively to waste handling?
- 4 A. That's mostly what they did.
- Q. Did they help out with deliveries if they weren't involved in waste handling?
- 7 A. Yes, they helped. They would -- They were on the
- 8 road, too. They would go to various testing grounds with
- 9 the material, the finished product, like Aberdeen Proving
- 10 Grounds and up in Cranny and in Oakland, St. Louis,
- ll Missouri, and New Jersey.
- 12 Q. Do you remember any material handlers quitting?
- 13 A. Sir?
- Q. Do you remember any material handlers quitting
- 15 their jobs?
- 16 A. No. There was a lot of production workers that
- 17 | would quit. Some would come in and maybe work two or
- three hours and they were gone. I mean, they couldn't
- 19 take the -- The CS, they couldn't stand it.
- Q. But that wasn't true of the materials handlers; is
- 21 | that correct?
- 22 A. Huh-uh.
- MR. WARREN: Would you clarify, counsel,
- 24 about whether there were any helpers or people that you
- 25 | might be thinking of material -- handling material that

```
weren't called material handlers?
 1
 2
             (By Mr. Wheeler) Were there people --
                                I am not clear on that.
                   MR. WARREN:
 3
                   MR. WHEELER: Okay. Let me ask the question.
 5
             Were there people who were involved in making
      deliveries of materials who you did not classify as
     material handlers?
 7
             No, sir.
      Α.
                   (Discussion off the record.)
                                 I would like to mark as
10
                   MR. WHEELER:
11
     Exhibit 4 what I will represent to be a -- what appears to
      be a map of the Chemtronics site when it was owned by
12
13
      Northrop which I obtained from the EPA FOIA file.
                   MR. LANE: Charlie, this would be No. 3.
14
15
                   MR. WHEELER:
                                 No. 3? Okay.
                                                It's Exhibit --
16
     Let's mark it as Exhibit No. 3.
17
                   (Copy of a one-page document entitled
             "Facility Layout" was marked (b)(6)
18
                                                   Exhibit
             No. 3 for identification.)
19
                   (Discussion off the record.)
20
             (By Mr. Wheeler) If I can, (b) (b) I would
21
      0.
     like you to look at Exhibit No. 3 and would you tell me if
22
23
      this appears to be an accurate representation of the
24
      buildings at the Northrop plant while you were working
25
      there? Take your time. I appreciate you are seeing it
```

- 1 for the first time.
- 2 A. Yes, sir. It's pretty much the same. There's --
- 3 Q. Could you tell me how it's different from what you
- 4 remember?
- 5 A. Well, I don't see Building 140 or one -- on here.
- 6 Q. What was Building 140?
- 7 A. That was the storage area where we would load and
- 8 unload the material to ship it.
- 9 Q. Can you draw on this map with a pen where
- 10 Building 140 was?
- MR. WARREN: Would you just put a little tiny
- 12 | building --
- 13 Q. (By Mr. Wheeler) Would you just put a little
- 14 | building --
- 15 A. It was right in --
- 16 Q. -- a rectangle and then draw a line and put "140,"
- 17 | if you would?
- 18 A. Right in here somewhere.
- 19 MR. WARREN: Okay. Just circle it.
- THE WITNESS: (Complied.)
- Let's see. There was a Building 139 right
- 22 | out from 140 where we would unload and store material like
- 23 | the silica gel and stuff like that. It was next to 140
- 24 out here.
- Q. (By Mr. Wheeler) Can you draw another rectangle

- 1 and label that as "139," please?
- 2 A. It wasn't 139, either. I have forgotten what the
- 3 | number was. 139 was the building we worked at. I can't
- 4 remember the number of it, but it was right next to 140,
- 5 Building 140.
- 6 MR. WARREN: Why don't we just put a question
- 7 | mark and circle that?
- 8 Q. (By Mr. Wheeler) Now, you testified --
- 9 A. Yeah, that's about as good as --
- 10 Q. So with those changes, you believe that map to be
- ll | an accurate representation of the site?
- 12 A. Yes, sir. The site is about the same, but there
- was some new buildings they built there while I was there.
- 14 | I don't see them on here.
- Is this the latest map they had?
- 16 Q. I have no idea. It doesn't have a copyright date
- on it, so I am just using one that had a fair number of
- 18 buildings shown on it.
- 19 A. Yeah. The area is about right, but there was some
- 20 new buildings that they built for manufacturing CS
- 21 grenades and stuff. I don't see it on here.
- 22 And the laboratory -- The new laboratory they
- 23 had, it's not on here.
- Q. Do you remember where those buildings were?
- 25 A. Yes, sir. They was --

1 Can you just draw them on and put a name beside Q. 2 them as to what they were? 3 Is this the only maps you have? Α. It's the most legible map I have. 4 Q. 5 Well, I --Α. MR. WARREN: You might show him the other 6 7 one. 8 THE WITNESS: Just looking at this, I 9 couldn't -- can't figure where to put the buildings. 10 just know there was more buildings on here that they built 11 while I was working there to manufacture the CS grenades and the --12

This building next to 140, it was built during the time -- Well, 140 and that building was built in the time I worked there, plus the other building where they manufactured their CS grenades.

And then they built a new laboratory up next to the testing area. It's not on here.

Q. (By Mr. Wheeler) Okay.

Well, what I will do, then, is introduce as Exhibit No. 4 a map which is identified as "Bee Tree Facility, 4-23-1971," which again I will represent comes from the files of the EPA kept at Warren Wilson College.

(Copy of a one-page document labeled "Bee Tree Facility, 4-23-1971," was marked (b) (6)

13

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17

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23

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Exhibit No. 4 for identification.)
 1
 2
                    (Discussion off the record.)
 3
             (By Mr. Wheeler) I would like you, when you look
      at Exhibit 4, to disregard the handwriting on this
 5
      document. The upper part of the document, do you see
      that?
      Α.
             Ilh-huh.
 7
             I would just like you to ignore that for the
 8
      Q.
 9
      moment.
10
      Α.
             Okay.
             This would appear to be a later map, since there
11
      Q.
12
      seem to be some additional buildings.
             Yes, sir.
13
      Α.
14
             Can you look at this map and tell me if it shows
      0.
15
      the additional buildings that you were referring to?
16
      Α.
             Yes, sir.
17
      Q.
             Can you circle those buildings on this map?
18
      Α.
             (Complied.)
19
                   (Discussion off the record.)
20
                   THE WITNESS: That was 122 there.
21
      Q.
             (By Mr. Wheeler) So you have drawn circles around
22
      the buildings --
23
      Α.
             Yes, sir, I have.
24
             -- that are not shown on the other map?
      0.
25
      Α.
             I think.
```

- 1 Q. Okay. I would actually like to go back to
- 2 Exhibit 3, if we could, because it's a little bit cleaner
- 3 copy.

( ... )

- 4 A. Okay.
- 5 Q. And you have referred previously to an area you
- 6 | call the burning ground; is that correct?
- 7 A. Yes, sir.
- 8 Q. Can you draw just on Exhibit 3 the approximate area
- 9 | the burning ground was located?
- 10 A. I think it's --
- MR. WARREN: Just put a "BG" in the middle of
- 12 that, if you would.
- THE WITNESS: (Complied.)
- Q. (By Mr. Wheeler) Now, the area that you have just
- 15 identified as the burning ground, does that include burial
- leareas, or are you dealing with those separately?
- 17 A. Well, I don't know if I drew it big enough or not.
- 18 T --
- 19 Q. I appreciate you are not a map draftsman.
- 20 A. The -- The burning ground was pretty good -- It was
- 21 a large burning area, but this looks like about it.
- MR. WARREN: He asked you about the burial
- 23 area.
- 24 THE WITNESS: Oh, the burial area?
- 25 Q. (By Mr. Wheeler) Was that a separate area?

- 1 A. What do you mean, the burying area?
- Q. Was there an area where materials were buried that
- 3 were not -- In other words, I understand that things may
- 4 have been buried at the burning ground.
- 5 A. Oh --
- 6 Q. But was there a separate area where things were
- 7 buried?
- 8 A. Well, yes, right at the bottom of the burning
- 9 ground area.
- 10 Q. So it's part of the burning ground that you have
- ll drawn on; is that correct?
- 12 A. Yes, I have drawn it right here at the bottom of
- 13 the burning ground where it was buried. There was some --
- 14 They had dug some trenches with a bulldozer, and they
- 15 | stacked the OCBA in there and covered it up.
- MR. WARREN: What if we put "BA" and an arrow
- 17 | to indicate where you have just drawn, if you put "BA" out
- 18 here and then put an arrow to where you -- to where I
- 19 | think people can -- to stand for "Burial Area"?
- MR. WHEELER: That's fine.
- 21 THE WITNESS: (Complied.)
- MR. WARREN: Okay.
- 23 Q. (By Mr. Wheeler) In addition to the burning
- 24 ground, were there other areas on-site in which you
- 25 | disposed of waste? And I am putting aside for the moment

- 1 the drain in Building 112 and 113. Let's ignore that.
- 2 Let's just talk about other areas around the facility
- 3 | which you used -- or which you knew were used to dispose
- 4 of waste.
- 5 A. There's several --
- 6 Could I ask you a question?
- 7 Q. Sure.
- 8 A. Do you mean the entry drums or just waste material?
- 9 Q. Let's start out with waste material.
- 10 A. Well, all the waste material was dumped into the
- 11 burning ditch.
- 12 Q. Did that include all liquid waste?
- 13 | A. Sir?
- 14 Q. Did that include all liquid waste?
- 15 A. There was a smaller ditch over to one side where,
- l6 | if they had a lot of liquid, maybe a half a barrel or
- 17 | something like that, would be dumped into the ditch, but
- 18 mostly it was all dumped into the main burning ditch.
- 19 Q. Can you show on the map where that ditch was and
- 20 label it with a "D"?
- MR. WARREN: Is that the same thing you have
- 22 | just drawn, or is it different?
- THE WITNESS: Well, this was the burning
- 24 ground. This is where they buried all that OCBA I was
- 25 | telling about. Up here was the burning ditch.

- MR. WARREN: All right. Let's put -- Draw an 1 2 arrow and put a "BD" there.
- 3 . THE WITNESS: In fact, there were several burning ditches, because when they would burn so much stuff and it would fill up, it would last for a long time, but eventually it would get kind of full, so they would come in with a bulldozer and cut another burning ditch which would last for a long time.
- 9 (By Mr. Wheeler) Okay. I am going to come back to 10 that in a minute.
- 11 Α. Okay.

5

6

7

- 12 Now, in addition to these, the burying -- the 13 burial area and this ditch where I guess you have testified liquids were placed, are there any other places 14
- 15 on-site where you disposed of waste?
- 16 MR. WARREN: Could you clarify "on-site" as 17 it was then? It may be offsite now.
- 18 MR. WHEELER: On-site as it was then.
- THE WITNESS: I can't remember. 19 There are 20 several places that we took stuff to, but I can't remember where it was. 21
- 22 (By Mr. Wheeler) Did you have names for those Q. 23 places?
- 24 Α. No, sir.
- 25 Q. But they were not located in that area that you

- 1 have just drawn in?
- 2 A. No. They were located in the burning area.
- 3 Q. What did you take to those other locations?
- 4 A. Just contaminated material like rags and some stuff
- 5 | like that.
- 6 Q. What did you do with the material when you got
- 7 | there?
- 8 A. Threw it in a ditch or whatever.
- 9 Q. Did you cover the ditch over?
- 10 A. No.
- 11 | Q. Did you ever keep any written records of -- Strike
- 12 | that.
- Did you ever make any written records of what
- 14 was being disposed of?
- 15 A. No, sir.
- 16 Q. And I am speaking of waste. Do you understand my
- 17 question to be that way?
- 18 A. Yes, sir.
- 19 Q. Do you know if anyone else kept written records of
- what waste was disposed of?
- 21 A. No, sir.
- 22 Q. Did you ever see anyone else making notes on the
- 23 | waste that was being disposed of?
- 24 A. No, sir.
- 25 Q. I would like to focus for the moment on the burning

- 1 trenches or ditches. How many were there when you
- 2 started?
- 3 A. The burning ditch?
- 4 Q. Yes.
- 5 A. One.
- 6 Q. One ditch. It was there when you arrived at
- 7 Northrop?
- 8 | A. Yes.
- 9 Q. How big was the ditch at that time?
- 10 A. About 100 feet long -- I mean about 100 yards long,
- ll about the size of a football field.
- 12 Q. How wide was it?
- 13 A. About five, six feet wide.
- 14 Q. And had the ditch been in use for a while at the
- 15 | time you arrived?
- 16 A. Yes, sir.
- 17 Q. How deep was it at the time you arrived?
- 18 A. Maybe five or six feet deep.
- 19 Q. Were there materials in the bottom of the ditch at
- 20 | that time when you arrived?
- 21 A. Yes, sir.
- 22 Q. What did those materials look like?
- 23 A. Pasteboard, Mark 24 flares, ignition disks,
- 24 ejection disks, plastic materials, just all kind of waste.
- 25 Q. Was there any kind of lining in the ditch?

- 1 A. No, sir.
- Q. Were there any provisions for drainage around the
- 3 ditch?
- A A. No, sir.
- 5 Q. Can you describe for me how materials got from the
- 6 production buildings, from outside them, to the ditch and
- 7 | how they were placed in the ditch in general?
- 8 A. Well, like I say, we would go around to the
- 9 different buildings, pick up the material, take it to the
- burning ground and throw it into the ditch. We would --
- 11 What Mark 24 flares were rejected they would
- 12 | set aside in these carts. When they would get the carts
- filled up, we would load them up, take them up to the
- burning ground and place them in the ditch.
- When we got the ditch filled we would pour
- 16 | black powder on top of it, and we had to go over the hill
- 17 | into a bunker, and it had a mirror on a post. We could
- 18 look and see the ditch. We would throw the electrical
- 19 wires in on top of the black powder and pull the switch,
- 20 | which would set the ditch on fire.
- 21 Q. Did the black -- Strike that.
- What sort of powder was this black powder?
- 23 A. Just a black powder, explosive powder, is all I
- 24 know.
- 25 Q. The kind that you would use, say, in construction

- 1 | work?
- 2 A. Yes, sir.
- 3 Q. Did the black powder explode when you detonated it?
- 4 A. It would explode some, yes, sir. When it was set
- 5 off it would make an explosion.
- 6 Q. Does the -- Strike that.
- 7 Is the area where you went when you set off
- 8 | the ditch shown on the map that is Exhibit 3?
- 9 MR. WARREN: That's this one right here.
- 10 Just is it shown?
- 11 THE WITNESS: No.
- 12 Q. (By Mr. Wheeler) Could you put a little X where
- 13 | that was?
- 14 A. Okay.
- MR. WARREN: I think we need to put it in
- 16 pen. Okay.
- 17 Q. (By Mr. Wheeler) How long --
- 18 A. It was a bunker, bunker-type place, where we would
- 19 get in and pull the switch.
- 20 Q. And by a bunker, you mean an underground protected
- 21 | area?

on.

- 22 A. Yeah, just something like a ditch we would jump
- 23 | into, but it had a pole that came up and had a mirror
- 24 where we could look in the mirror and see what was going
- 25

- Q. Now, when you were putting waste into the ditch did
  you just drive the truck up beside the ditch?
- A. Drive up to the ditch, back it up to the ditch and just throw it off into the ditch.
- 5 Q. How long did it take to fill the ditch, usually?
- 6 A. Well, it all depend on how much material was going
- 7 in. Sometimes they would burn once a week; sometimes they
- 8 | would go a couple of weeks without burning.
- 9 Q. Was there any particular time that a burn would be
- 10 | scheduled for?

- 11 A. No, sir. They didn't schedule.
- 12 Q. Was it simply when the ditch was filled?
- 13 A. When it was filled enough that they thought it
- 14 should be burned, we would burn it.
- Q. Now, when you say they thought it should be burned,
- 16 who made that decision?
- 17 A. Usually the ones that haul the material up. We had
- 18 to notify Safety that we were -- that they were going to
- 19 burn.
- 20 Q. And who would you call in Safety?
- 21 A. Either (b) (6) or (b) (6)
- Q. Did anyone come to watch the burns?
- 23 A. No.
- Q. Were there ever explosions during the burns?
- 25 A. Oh, yeah.

- 1 Q. Can you -- Was that a common occurrence?
- 2 A. It was pretty common, like those -- The ignition
- disks, they were red disks. They would catch fire and
- 4 shoot up into the air and fly ever which way.
- 5 Q. Did the burning produce a lot of smoke?
- 6 A. Oh, yes. You could see it all over. The Mark 24
- 7 | flares, they really made a big white cloud.
- 8 Q. Were you ever exposed to that smoke?
- 9 A. Yeah. I was right there a lot of times when we
- 10 burned.
- 11 0. What did the smoke smell like?
- 12 A. I can't remember.
- 13 Q. Did anyone outside the plant ever speak to you
- 14 about the burns?
- 15 A. I never did talk to anybody outside the plant about
- 16 | it.
- 17 Q. Why was that?
- 18 A. We were told not to talk to anybody about anything
- 19 about what went on inside the gates.
- 20 Q. And who was it that told you that?
- 21 A. Personnel when we was hired in.
- Q. Did you have to sign anything about top secrecy?
- 23 A. We signed some papers. We signed some papers when
- 24 | we was hired in.
- 25 Q. What happened to the smoke from the burning?

- 1 Obviously it rose in the air. Where did it go?
- 2 A. Just in the air and all over, I guess.
- 3 Q. Did it rise away from the plant?
- 4 A. It was -- The burning ground was away from the
- 5 | plant. It was up on a mountain, sort of, and it all
- 6 depend on which way the wind was blowing or anything.
- 7 Q. Did the smoke ever blow down into the valley of the
- 8 Bee Tree Creek?
- 9 A. Yes.
- 10 Q. Did people live in that valley?
- 11 A. Yes, sir.
- 12 Q. Do you know if anyone in the valley ever complained
- 13 about the smoke?
- 14 A. I have heared they complained about the smoke and
- the ashes that would blow around, and the CS smell.
- 16 | Q. Who did you hear that from?
- 17 A. People that worked in the plant. They would call
- lover there complaining. A lot of times they would shut
- 19 down Building 113 and change the scrubbers, because they
- 20 | got so many complaints about the smell and the CS blowing
- 21 over into their neighborhood.
- Q. Okay. That is a little different than the smoke
- 23 | from the burning ground; is that correct? In other words,
- 24 you are talking about the problem from Building 113 in
- 25 | terms of CS getting into the air.

- 1 A. I am talking about the whole thing, the smoke, and
- 2 | when they would burn it would blow into their
- 3 | neighborhood, the ashes, and also the CS would blow over
- 4 into their community.
- 5 Q. Did you ever see the filters being changed where
- 6 you understand they were at that Building 113, where you
- 7 understood there had been complaints?
- 8 A. Yes, sir. I have seen scrubbers changed a lot.
- 9 Q. When you say there were ashes blown over, were
- 10 those ashes while the fire was going?
- 11 A. Yes, sir.
- 12 Q. When there were explosions within the fire did that
- 13 | throw material up into the air?
- 14 A. Yes, sir.
- 15 Q. Did you see where that material went?
- 16 A. It didn't throw it that far. It was just up and
- 17 back down.
- 18 Q. Did it stir ashes up into the air?
- 19 A. Yes, sir.
- Q. Do you know what those ashes were made of?
- 21 A. The Mark 24 material and whatever was in the ditch.
- 22 Q. How long did the fire take to burn out?
- 23 A. I don't really know.
- 24 Q. Did you watch the fire from beginning to end?
- 25 A. No, sir.

- 1 Q. Did anyone watch the fire from beginning to end?
- 2 A. Not that I know of.
- 3 Q. Was there any concern about the fire spreading?
- 4 A. No, sir.
- 5 Q. Why not?
- 6 A. It was cleared off. There was no danger.
- 7 Q. So your testimony is that you would just go up and
- 8 start the fire going and perhaps watch it for a while, and
- 9 | then just leave it?
- 10 A. We would watch it until it was almost out, but it
- ll wasn't completely out, you know, just smoking some. That
- 12 was it.
- 13 Q. Then when would you start putting more material
- 14 | into the ditch after the fire?
- 15 A. The next day.
- 16 Q. You left it -- Did it cool off for a day?
- 17 A. Yes, sir.
- 18 Q. Did you ever have too much material to put in the
- 19 ditch at one time?
- 20 A. No. When we would get it full we would burn it.
- 21 Q. I believe you have testified that you took material
- offsite because it was bulky; is that correct?
- 23 A. Yes, sir.
- Q. That was material that could have been burned in
- 25 | the ditch; is that correct?

1)

- 1 A. It could have, but they would have had to burn two
  2 or three times a day if they disposed of all the material
  3 on the burning ground.
- Q. So, if I understand it correctly, part of the reason for taking material offsite was to reduce the number of burnings required?
- 7 A. Reduce the burnings, and there was just too much 8 material for that section.
- 9 Q. Did the trench in the burning ground where burning 10 was done eventually fill up with residue?
- ll A. Yes, sir.
- 12 Q. About how often did that happen?
- 13 A. It would take several months.
- Q. When the trench was full to the top what -- or strike that.
- Did you wait until the trench was full to the top?
- 18 They wouldn't -- didn't ever wait until it No. 19 would completely fill up. They would cover it over and 20 then dig another ditch. In fact, I only know of one other 2.1 ditch that was dug while I was there, and I was there for -- I worked for Northrop from (b) (6) until they closed 22 23 down, and I only know of one other ditch that they dug 24 besides the one that was there when I first arrived there. 25 That's how long the ditch would last.

- 1 Q. Did the entire ditch, that is, all 300 feet, get
- 2 burned?
- 3 A. Yes, sir.
- 4 Q. Okay. So every week or two weeks you could fill
- 5 the entire ditch with waste; is that correct?
- 6 A. We could fill it, but a lot of times they didn't
- 7 | wait until it got plumb full, I mean. It wasn't always
- 8 full when they would burn. They just would burn when they
- 9 thought it was necessary.
- 10 Q. Do you remember when the initial ditch that was
- ll | there when you arrived was covered over?
- 12 A. I had been there maybe two years before I seen them
- dig another ditch, but now I wasn't up there all the time,
- 14 | so that's the only time I know of them digging another
- ditch since I was there, the whole time I was there.
- 16 Q. Now, did you see someone digging another ditch?
- 17 A. Yes, sir.
- 18 Q. Do you know who it was who dug that ditch?
- 19 A. No, sir.
- 20 Q. Was it someone who worked at Northrop?
- 21 A. It was outside help.
- 22 | Q. Did you watch the ditch being dug?
- 23 A. I just was going up through there taking some drums
- 24 to throw at the side of the mountain and seen the
- 25 bulldozer digging a ditch.

- 1 Q. Now, when you say that you were taking drums up to
- 2 be thrown over the side of the mountain, was that one --
- 3 were those drums thrown on Northrop property?
- 4 A. Yes, sir.
- 5 Q. Is that property shown -- or the property shown on
- 6 | the map that's Exhibit 3?
- 7 A. Yes, sir.
- 8 Q. Can you show me by putting a circle and putting a
- 9 "M" on it where that was, an approximate?
- 10 A. Yes. Okay.
- 11 Q. Was there a road up to that area?
- 12 A. Yes, sir.
- 13 Q. Can you draw approximately where that road ran?
- 14 A. Yes, sir, I did.
- 15 Q. Okay. And so there is a line that is shown on the
- 16 map that shows where the road is?
- 17 A. Yes, sir, but --
- 18 Q. Was that a dirt road?
- 19 A. Yes, sir.
- 20 Q. Where did the road go?
- 21 A. It went on around the mountain. In fact, this map
- 22 | is not big enough, because we would take it all on up the
- 23 | top of the mountain. We have done runs all over that
- 24 mountain.
- Q. Were these drums empty?

- 1 A. Yes, sir. They probably had some material in them,
- 2 but they had been used.
- 3 Q. What sort of terrain did you roll these drums into?
- 4 A. Just the wooded area, just threw them off the -- We
- 5 | would park the truck in the road and just throw them off
- 6 the truck over the mountainside, and they would roll down
- 7 the mountain until they stopped rolling.
- 8 Q. Could you see where the drums went?
- 9 A. Yes, sir.
- 10 Q. Who was with you when you threw these drums off the
- ll trucks?
- 12 A. (b) (6) and (b) (6) and (b) (6) and (b) (6) , and
- 13 | that's about it.
- 14 Q. Were you told by anyone where to dispose of the
- 15 drums?
- 16 A. No, sir.
- 17 Q. Do you know if anyone was told where to dispose of
- 18 | the drums?
- 19 A. Oh, we were told to take them up on the mountain
- 20 and throw them off the mountain.
- 21 Q. Who told you that?
- 22 A. Our foreman, supervisor. Mr. David Smith, he was
- 23 | the dispatcher. He would come around and tell us to go
- 24 | clean up some drums and take them up and throw them over
- 25 | the mountains.

8

7

He is deceased.

- 2 0. Now, when you say clean up the drums, what was 3 done --
- Α. Pick them up in one area -- different areas where 5 they had gathered, you know, like up at Building 105, 108, 107, wherever they were working. We would pick them up 6 7 and take them up on the mountain and throw them off down
- 9 But when you are saying clean up, did you make --10 did you do anything to clean the interior of these
- 11 barrels?

the hill.

- 12 No. What I mean by cleaning up is going to the Α. different buildings where the programs were going on. 13 The 14 drums that they had used would be sitting outside off the 15 building. What I mean by cleaning up is picking up the 16 drums from that area and taking them up on the mountain 17 and disposing of them.
- 18 0. Did you know what chemicals had been in those 19 drums?
- 20 Different chemicals like OCBA and MN, toluene, Α. 21 stuff like that. They were 55-gallon drums.
- 22 Q. You didn't wash the interior of the drums out?
- 23 Α. No.
- 24 Ο. Do you know if --
- 25 A lot of them was magnesium drums and had aluminum Α.

- 1 powder. Those drums were also thrown over.
- 2 Q. Do you know if those drums are still there?
- 3 A. We went out to show the EPA where we had dumped
- 4 them, but we couldn't see none from where we were. They
- 5 | would only let us go certain places.
- 6 Q. Did they let you go places where you had thrown the
- 7 drums down the mountainside?
- 8 A. Yes, sir, but we couldn't see far enough down to
- 9 see if all of them was there. We seen a lot of the drums
- 10 | that were still up here.
- 11 Q. Up where?
- 12 A. Up around the burning ground and the mountain, all
- 13 up through there. There were several sites where they
- 14 were some drums.
- MR. WARREN: Could you get a date on that,
- 16 | because I want to make it clear whether it was when he was
- working there or whether he went back with the EPA?
- MR. WHEELER: Yes.
- 19 Q. Now, this is -- When you are describing seeing the
- 20 drums, this is when you went with the EPA; is that
- 21 | correct?
- 22 A. Yes, sir. That was --
- When was that, Bob? About four years ago?
- 24 Q. Who was with you on that trip?
- 25 A. Jon Bornholm.

1 THE REPORTER: Say it again, please. 2 THE WITNESS: Jon Bornholm. (By Mr. Wheeler) Was anyone else with you? 3 0. Α. Who was that other --5 MR. WARREN: If you don't remember, you just 6 have to say --7 Q. (By Mr. Wheeler) Can I ask -- Can I say some names 8 to see if they refresh your recollection? 9 Α. Okay. 10 0. Was Mr. Burleson with you? 11 Α. Yeah, Roy Burleson. Me and Roy Burleson and Jon 12 Bornholm. Was there a Mr. Johnson from Chemtronics with you? 13 Q. 14 Α. There was somebody, but I don't remember his name. 15 MR. SEIFE: Did you say Mr. or Mrs.? 16 MR. WHEELER: I have no idea. There is only 17 a first initial. 18 Do you remember whether it was a man or a woman 19 with you? 20 I think there was a woman with us at one time. Α. 21 Before the -- Strike that. 0. 22 Did anyone ever conduct tests of the residue 23 in the burning ditch? 24 Α. No, sir.

Did you ever see anyone conduct any tests?

Q.

- 1 A. No, sir.
- 2 Q. After the -- Strike that.
- 3 Did you see the first burning ditch being
- 4 | covered over?
- 5 A. Yes, sir.
- 6 0. Was it done with a bulldozer?
- 7 A. Yes, sir.
- 8 Q. Did you actually see the dirt being pushed over the
- 9 ditch?
- 10 A. He had -- I didn't see it actually being pushed
- ll over. Like I say, when I seen this man digging another
- 12 ditch, when I was taking -- we were taking the drums up to
- 13 be throwed over the side of the mountain -- the other
- 14 ditch was already covered over. And he was digging the
- ditch down below where the other ditch was, so it had
- l6 | already been covered over. I didn't actually see him
- 17 | cover it, but I assumed he did since he was there with a
- 18 bulldozer.
- 19 Q. The ditch wasn't there anymore; is that correct?
- 20 A. It wasn't there, and he was pushing out a new
- 21 ditch.
- Q. Did you see any material being taken away from the
- 23 | old ditch before it was covered over?
- 24 A. No.
- MR. WARREN: Could we take about a

- 1 five-minute break?
- 2 MR. WHEELER: Let's take a 15-minute break to
- 3 let this room cool off.
  - (Recess.)
- MR. WHEELER: It's 3:25 p.m., and we are back
- 6 on the record.

- 7 Q. (b)(6) I would like to go back a minute to
- 8 | the BZ-contaminated materials from Building 113 that you
- 9 carried up to the burning pits.
- 10 A. Yes, sir.
- 11 Q. To your knowledge, were those materials burned?
- 12 A. Yes, sir, they were burned, because we threw it in
- 13 the burning ditch, and that's where they stayed until they
- 14 were burned.
- 15 Q. Did (b)(6) and (b)(6) have any assistants
- 16 | to help them with waste disposal?
- 17 A. No, sir. In fact, that's the reason they wanted
- 18 the job. They was more or less out on their own. They
- 19 didn't have nobody telling them what to do or anything.
- 20 They more or less was on their own.
- 21 Q. I would like to focus now on the ditch for the
- 22 disposal of liquids that you just -- that you mentioned.
- 23 A. Yes, sir.
- 24 Q. How big was that ditch?
- 25 A. Oh, it was just a small ditch, maybe ten feet.

```
1
      Q.
             Long?
 2
      Α.
             Yes, sir.
 3
      Q.
             How deep?
             Maybe four or five feet deep.
 4
      Α.
 5
      Q.
             How wide?
 6
      Α.
             I can't remember. It wasn't very wide.
             Was it a V-shaped ditch?
 7
      ٥.
 8
      Α.
             Just an oblong.
 9
             Do you know -- Strike that.
      Q.
10
                    Did you see it being dug?
11
      A.
             No, sir.
12
      Q.
             Did you dispose of any waste from that ditch?
13
             No, sir.
      Α.
14
             Did you ever see anyone disposing of waste in that
      Q.
15
      ditch?
             Yes, sir. I have seen (b) (6) and (b) (6) pour stuff
16
      Α.
17
      into the ditch.
18
      Q.
             And that's (b) (6)
                                     and (b) (6)
19
      Α.
             Yes, sir.
20
             Do you know what (b)(6) poured into that
      Q.
21
      ditch?
22
             No, sir.
      Α.
             Do you know what (b) (6) poured into that ditch?
23
      Q.
```

Do you know how much liquid was poured into the

24

25

Α.

Ω.

No, sir.

- 1 ditch?
- 2 A. No, sir.
- 3 | Q. Do you know why they poured liquid into that ditch?
- 4 A. No, sir, I don't.
- 5 Q. Was there ever any liquid standing in that ditch
- 6 | after they had poured something in it?
- 7 A. I never did notice.
- 8 Q. Did the ditch have any lining?
- 9 A. No, sir.
- 10 Q. Was that ditch still in use at the time that you
- ll quit working as a materials handler?
- 12 A. Yes, sir. Both ditches were still there.
- 13 Q. When did you quit work as a materials handler?
- 14 A. When Northrop went out of business.
- 15 Q. And that was in 1971; is that correct?
- 16 A. I think they went out of business in 1970. I am
- 17 | not for sure.
- 18 Q. Were there any other ditches or pits in the area of
- 19 | this liquid ditch?
- 20 A. No, sir.
- 21 | Q. Did you ever dispose of any waste materials near
- 22 | Bee Tree Creek?
- 23 A. Yes, sir.
- 24 Q. Where was that?
- 25 A. It was just right off the road. You went out the

- front gate and down the road. It's where the -- that processing company is now, Asheville Dye.
- 3 Q. Was that part of Northrop's property at the time?
- 4 A. I don't know. That's the reason I didn't say
- 5 before whether it was on-site or offsite. I don't know
- 6 whether that was Northrop property or if it was offsite.
- 7 Q. Can you look at Exhibit 3? Can you show on that
- 8 exhibit approximately where this area was?
- 9 A. Yes, sir.
- 10 Q. Can you put a circle and an "A" where that area
- 11 | was?
- 12 A. Okay.
- 13 Q. What waste did you dispose of in that area that's
- 14 | now in Circle A?
- 15 A. Just about all kind of material, mostly pasteboard.
- 16 We would burn the pasteboard down there, just throw it out
- 17 and burn it. But we also disposed of explosives down
- 18 | there and other material, just threw it on top of the
- 19 ground. You can probably go out there and find some of
- 20 | it.
- 21 Q. Did anyone dispose of waste down there besides you?
- 22 A. Yes, sir.
- Q. Who was that?
- 24 IA.
- 25 Q. Why --

```
1 A. And (b) (6)
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- 2 Q. And that's (b) (6)
- 3 A. Yes, sir.
- 4 Q. What was the terrain like in that area at the time
- 5 you were disposing of waste?
- 6 A. It's just a flat, swampy land.
- 7 Q. Is it right along the creek?
- 8 A. Yes, sir.
- 9 Q. Why did you dispose of waste in that particular
- 10 | area?
- 11 A. I have no idea.
- 12 Q. Did (b) (6) decide to dispose of the waste
- 13 there?
- 14 A. I didn't go down there with (b)(6). I went
- with (b)(6) several times. I didn't never go down
- 16 there with (b)(6)
- 17 Q. Did  $\binom{b}{6}$  make the decision to go down there?
- 18 A. Yes, sir.
- 19 Q. Was this in the daytime?
- 20 A. Yes, sir.
- 21 Q. Did you dispose of waste at night?
- 22 A. No.
- Q. Did you burn the explosives that were disposed of
- 24 | in that area with the circle and "A" on it?
- 25 A. We didn't burn the explosives. We burned the

- 1 cardboard.
- 2 Q. What did you do with the explosives?
- 3 A. Just threw them out on the ground.
- 4 Q. And the ground was muddy?
- 5 A. Yes, sir. They were in containers, drums,
- 6 | magnesium drums, small drums.
- 7 Q. What happened to the drums?
- 8 A. I don't know.
- 9 Q. Did they stay on the surface of the ground?
- 10 A. Yes, sir.
- 11 Q. Was it just sort of a little garbage dump,
- 12 | basically?
- 13 | A. Yes.
- 14 Q. Do you know if (b)(6) knew that you were
- 15 disposing of explosives down there?
- 16 A. (b) (6) knew. (b) (6) knew.
- 17 (b) (6) knew. The president of the company knew.
- 18 Everybody knew what was being dumped down there.
- 19 Q. How do you know that?
- 20 A. They had to know. They seen us take it down there.
- 21 They seen the smoke from the fires down there.
- 22 Q. How about the explosives, though?
- 23 A. Sure, they knew it was down there, because they
- 24 | seen us take it down there. We had to check out the gate
- 25 | to take the stuff down.

- Q. Whenever waste was taken offsite did you have to
- 2 | check out the gate?
- 3 A. You sign in and out.
- 4 Q. Did you have to do anything besides sign your name?
- 5 A. Show your badge.
- 6 Q. But you didn't have to sign what material was going
- 7 | in or out?
- 8 A. No, sir. Just sign where you were going and the
- 9 time you left and the time you came back.
- 10 Q. Was this area where you had these barrels with the
- ll explosives in it fenced?
- 12 A. Yes, sir. It was fenced in, and there was a gate
- we would have to unlock. When we would leave going back
- 14 into the area we would lock the gate back.
- 15 Q. Was the burning ground fenced?
- 16 A. No, sir.
- 17 Q. Did you ever have any concerns about kids getting
- into the area where the explosives were?
- 19 A. I never did think about it. I thought that's where
- we were supposed to take it, so it wasn't my concern.
- 21 Q. Did you -- Strike that.
- Did you put waste materials at Asheville --
- 23 | at the Asheville Dye or a site throughout the period you
- 24 | worked at Northrop?
- 25 A. Yes, sir.

- 1 Q. Was it an existing area when you started there?
- 2 A. Yes, sir.
- 3 Q. What sort of fence was it?
- 4 A. Just a wire fence, an aluminum gate.
- 5 | Q. Was it a chain link fence?
- 6 A. No. It was just a regular wire fence.
- 7 Q. Barbed wire?
- 8 A. Square wire, blocks, just regular fencing wire.
- 9 Q. Oh, the kind you would see on a farm?
- 10 A. Yes.

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- MR. WARREN: Before we leave, Exhibit 3 -Inadvertently I had given him my copy of Exhibit 3, and he
  drew on -- We probably should make this exhibit next so
  that when you refer -- 3-A or something like that, so that
  his drawings will be on the same thing. I didn't know it
  until I just saw the court reporter's --
  - MR. WARNER: If I may suggest, counsel, let him mark it on Exhibit 3 as he inadvertently marked on counsel's copy.
- MR. WHEELER: That's fine with me. Why don't you take the time right now to do that?
- MR. WARREN: Well, I tell you, there is
  nothing else on Exhibit 3. If we could just get the court
  reporter to take her label from Exhibit 3 and put it on
  the top of this one, then it's all corrected.

MR. WHEELER: That's fine with me. 1 2 MR. WARNER: If all of the witness's 3 handwritten interlineations are on a single document, I 4 don't care how it is done. 5 MR. WARREN: Okay. Let's just switch the 6 labels so that we have one Exhibit 3. 7 MR. GOLD: Could we go off the record for a 8 moment? 9 (Discussion off the record.) 10 MR. WHEELER: Let's go back on the record. 11 It is now 3:39 p.m. 12 did you dispose of waste offsite ٥. 13 excluding the Asheville Dye site? 14 Yes, sir. Α. 15 Can you tell me how many places you disposed of 0. 16 waste offsite? 17 Α. At the landfill on 70, Highway 70. 18 Q. Is that the landfill where Tropigas is now located? 19 Α. Yes, sir. 20 Q. Did you ever dispose of any waste at the Buncombe 21 County landfill in Walnut Cove? 22 Α. Buckeye Cove. 23 Q. Buckeye Cove. 24 Α. Yes, sir. 25 Q. Did you dispose of waste at any other location?

- 1 A. Yes, but I can't remember where they were.
- Q. Is there anything that would refresh your
- 3 | recollection?
- 4 A. I think it was Bee Tree -- I mean, Beacon dumping
- 5 ground where we dumped some stuff. And then there was --
- 6 MR. GOLD: Is that Beacon?
- 7 THE WITNESS: Beacon, yes, sir.
- 8 And then there was another place we took it
- 9 to, but I can't remember where it was. It was way around
- 10 from Beacon, around through there. I can't remember how
- ll | to get there or anything, but I know we dumped some stuff
- 12 at that place.
- 13 Q. (By Mr. Wheeler) Did you go by yourself at any
- 14 | time to dump material?
- 15 A. No, sir.
- 16 Q. And that's offsite I am talking about.
- 17 A. Yes, sir.
- 18 Q. Who did you go with?
- 19 A.
- 20 Q. Anyone else?
- 21 A. That's it.
- 22 Q. Can you estimate how many times you went to Buckeye
- 23 Cove?
- 24 A. I just went to Buckeye Cove one time.
- 25 Q. Do you remember when that was?

- l A. No, sir.
- 2 Q. Do you have any recollection of that particular
- 3 trip to Buckeye Cove?
- 4 A. Yes. We took a lot of CS bags out there and dumped
- 5 them.
- 6 Q. When you say CS bags, were those bags that had --
- 7 A. Contaminated bags that had raw CS in them and
- 8 silica gel bags.
- 9 Q. Where did those bags come from?
- 10 A. I don't know, sir.
- 11 Q. Did you load those bags on the truck to take them
- 12 to the Buckeye Cove landfill?
- 13 A. I helped (b) (6) load them.
- 14 Q. Do you know what building you loaded them at?
- 15 A. 113.
- 16 Q. Do you -- Strike that.
- Do you know why those bags were taken to the
- 18 | landfill?
- 19 A. No, sir.
- 20 Q. Did (0)(0) talk to you about why he was taking
- 21 | those bags to the landfill?
- 22 A. No, sir.
- Q. Could you see raw CS in the bags?
- 24 A. Yes, sir.
- 25 | Q. How did you know it was CS in the bags?

- 1 A. I knew what it looked like, and you could smell it.
- 2 Q. Okay. So you could smell it?
- 3 A. Yes, sir.
- 4 Q. When you got to the landfill what did you do?
- 5 A. Threw them in the trash, and the man on the
- 6 bulldozer came by and covered them up. In fact --
- 7 Q. Do you know who it was that was on the bulldozer?
- 8 A. No, sir, but he got contaminated once out there
- 9 when (b)(6) took some stuff out there.
- 10 Q. Was that on the trip that you --
- 11 A. No, sir. I wasn't there that time. James told me
- 12 about it. The man, he got overcame with the CS, and
- 13 (b) (6) took the bulldozer and covered it up, hisself.
- 14 Q. Do you know if (b) (6) took CS bags to the
- 15 Buckeye Cove landfill on any occasions other than what you
- 16 have just described, that is, the one where you went with
- 17 | him and the time that there was apparently a problem with
- 18 | the operator at the landfill?
- 19 A. Yes, sir. He took it out there several times.
- 20 Q. How do you know that?
- 21 A. Well, he would tell us where he was going.
- 22 | Q. Did you see CS bags on the truck?
- 23 A. Yes, sir.
- 24 Q. And the truck drove off in that direction?
- 25 A. Yes, sir.

- 1 Q. Did he continue to do that after the accident?
- 2 A. Yes, sir.
- Q. Did you ever ask him about why he was continuing to
- do that after the accident to the operator?
- 5 A. No, sir. I never did ask him, but I figured he had
- 6 | taken it out there because it wouldn't fill up the burning
- 7 ditch so quick, because they didn't want to burn so much.
- 8 Q. But that was an assumption on your part?
- 9 A. That was, yeah.
- 10 Q. On this one trip to the Buckeye Cove landfill I
- ll believe you testified there were some silica gel bags.
- 12 A. Silica gel.
- 13 Q. Did that look different from the CS?
- 14 A. Yes, sir.
- 15 Q. How did it look different?
- 16 A. The silica gel was a real fine, powdery stuff, and
- 17 the CS was more coarse, more like a talcum powder.
- 18 Q. And you could see the powder inside the bags; is
- 19 | that correct?
- 20 A. Yes.
- 21 Q. And that's both the CS -- And that is the CS that
- 22 you could see through the bag?
- 23 A. You could see it in the bag, on the bag, just
- 24 | wherever it had -- It would be in the bag, on the bag, on
- 25 | the truck where it would spill out on the truck.

- 1 Q. Did you ever clean off the truck after carrying CS?
- 2 A. They would hose it off every once in a while.
- 3 Q. Where was the truck hosed off?
- 4 A. Different places.
- 5 Q. I believe you testified that you also disposed of
- 6 | waste at the landfill that's now on the Tropigas site; is
- 7 | that correct?
- 8 A. That's the landfill on U. S. 70.
- 9 Q. Yes, sir. How many times did you dispose of wastes
- 10 at that landfill?
- 11 A. I was only there one time.
- 12 Q. Do you remember that trip specifically?
- 13 A. No.
- 14 Q. Do you know who you were with?
- 15 A. I think I was with (b) (6)
- 16 Q. Are you positive?
- 17 A. No, sir. It could have been (b) (6)
- 18 Q. Do you remember what was dumped on that trip?
- 19 A. Just regular material from all the buildings.
- 20 Q. You also testified, I believe, that you disposed of
- 21 | waste at the Beacon, B-e-a-c-o-n --
- 22 A. Beacon.
- 23 | Q. -- landfill?
- 24 A. Yes, sir.
- 25 Q. On how many occasions did you dispose of waste at

- 1 | the Beacon landfill?
- 2 A. I think I went to the Beacon landfill twice.
- 3 Q. Do you remember who you went with on each occasion?
- A. I think it was (6) (6)
- 5 Q. Do you remember when that was?
- 6 A. No, sir.
- 7 O. What -- Strike that.
- 8 What did you take with you on the first trip
- 9 to the Beacon landfill, if you recall?
- 10 A. Cardboard, all the material that was cleaned up
- If from the buildings, put on the truck and took it to the
- 12 landfill.
- 13 Q. Did you take any CS to any landfill other than the
- 14 Buckeye Cove landfill?
- 15 A. TO U. S. 70.
- 16 Q. And that would be CS mixed in with the regular
- 17 | waste; is that correct?
- 18 A. With the regular waste.
- 19 Q. Did you take any CS bags to any landfill other than
- 20 Buckeye Cove?
- 21 A. Yes.
- 22 Q. Where did you take the CS bags?
- 23 A. To the landfill on U. S. 70; also to the Beacon
- 24 | landfill.
- 25 Q. So that was just part of the regular load; is that

- 1 | correct?
- 2 A. Yes, sir.
- 3 Q. To your knowledge, was that common for the CS bags
- 4 to be included in a regular load of things of waste?
- 5 A. Yes, sir.
- 6 Q. Do you recall -- Strike that.
- 7 What did you take with you in terms of waste
- 8 on the second trip to Beacon?
- 9 A. The same -- The same material from each building,
- 10 where we would go around to each building to pick up
- 11 | all -- clean out all trash bins and throw it on the truck.
- 12 | That was from Building 105, 113 and 108 -- I mean 107 --
- 13 | 122. Just all the buildings that was working, we would go
- laround and clean up their trash bins, load it on the truck
- 15 and haul it off.
- 16 Q. I believe you also testified that you went to one
- 17 other landfill; is that correct?
- 18 A. Yes, sir, but I don't know where it was.
- 19 Q. Do you remember who you went with?
- 20 A. I think it was (b) (6) I am not for sure.
- 21 Q. Do you recall anything about that trip other than
- 22 it may have been with  $\binom{(b)(6)}{(b)}$
- 23 A. No, sir. I just knew it was someplace I hadn't
- 24 been before.
- 25 | Q. Did you ever take any liquid waste offsite?

- Just what was in the rags. 1 Α. Do you know if (b) (6) ever took any liquid 2 0. 11 waste offsite other than what was in the rags? 3 Α. I don't know, sir. Do you know if (b)(6) took anything offsite, any 5 0. liquid waste offsite, other than what was in the rags? 6 Α. 7 I don't know. were you involved at any time in the 8 0. 9 testing of products by quality control? 10 Α. We would just take the samples up to the testing 11 area to be tested. I wasn't connected with testing. We 12 would take them up, and when they would test them we would see it. 13 14 Did you ever have any involvement with x-raying Q. 15 samples? 16 Α. Yes, sir. 17 Can you describe that for me? 0. 18 Α. We would take the Mark 24 flares, BFI flares up to 19 x-ray. They would x-ray them for cracks. And if they 20 were okay, we would go back and pick them up and bring 21 them back down to the building where the program was going 22 They would put them back in the lot to be shipped,
  - Q. When you say "we," who are you talking about?

and if they were rejected, we would take them to the

23

24

25

burning ground.

- 1 A. Me and (b) (6)
- Q. Can you describe for me how you went about taking
- 3 the flares up to the test -- or the x-ray facility?
- 4 A. We just put them on the truck and hauled them up
- 5 | there and unloaded them off the truck and put them on the
- 6 little handcart and pushed them into the building to be
- 7 | x-rayed.
- 8 Q. Did you stay in the building while the x-rays with
- 9 being taken?
- 10 A. Yes, sir.
- 11 Q. Were you told to stay in the building while the
- 12 x-raying was going on?
- 13 A. We were told to wait on them, get the report.
- 14 O. Were you told not to stay in the building while the
- 15 | x-raying was going on?
- 16 A. No, sir.
- 17 Q. Was there more than one x-ray facility?
- 18 A. Yes, sir. There was an x-ray facility on up on the
- 19 testing area where they x-rayed the machinery.
- 20 Q. Did you have any involvement with that x-ray?
- 21 A. Yes, sir.
- 22 Q. Can you just -- Can you tell me what was done at
- 23 | that x-ray?
- 24 A. We would take the machinery up to be x-rayed for
- 25 cracks in the machinery. We would take it up on a Hyster

- forklift, dual-wheel forklift, heavy-duty. We would take
- 2 | it around the side of the building to be x-rayed, and we
- 3 | would sit on the Hyster while they were x-raying the
- 4 machinery.
- 5 Q. Do you know if you were exposed to x-rays?
- 6 A. Yes, sir.
- 7 Q. How do you know that?
- 8 A. I asked the operator one time, I said, "Why do we
- 9 have to sit back there with the machinery while it's being
- 10 | x-rayed?"
- He said, "Well, don't worry about it. You
- 12 are too old to have any more kids, anyway."
- 13 Q. Were you never told not to sit on the Hyster prior
- 14 to that?
- 15 A. No, sir.
- 16 Q. Did the x-ray operator see you sitting on the
- 17 Hyster?
- 18 A. Yes, sir.
- 19 Q. How do you know that?
- 20 A. He was looking at me when he was x-raying the
- 21 | machinery. I thought we were protected, but we wasn't
- 22 | protected.
- 23 Q. How many times did you deliver machinery on the
- 24 Hyster to be x-rayed?
- 25 A. Maybe once every three or four months. That was

for the heavy-duty x-ray for the machinery. We took the 1 flares up to x-ray maybe every day, every two days. 2 Do you know if you were exposed to x-rays when the 3 flares were being x-rayed? 5 I am pretty sure we was, but I couldn't say for Α. sure. We were in the building when they were being The x-ray technician had a badge where it would 7 x-rayed. show if he was getting too much. 8 Were there any signs in the building where the 9 Q. 10 flares were tested warning about x-rays? 11 No, sir. Α. 12 MR. WHEELER: I would like to mark as Exhibit 5 what I will represent to be a copy of an 13 original document which (b)(6) brought with him, 14 which is a transcript of an interview which, according to 15 16 this, took place on December 11, 1985. I will invite counsel to compare it, if they 17 18 so desire. obviously wants to keep the 19 original. (Discussion off the record.) 20 21 (Copy of a 26-page transcript of an 22 interview with (b)(6) taken on December 11, 1985, by the U. S. Environmental Protection Agency 23

was marked (6) (6) Exhibit No. 5 for

identification.)

24

- MR. WHEELER: Let's go back on the record.

  It is now 3:57.

  Q. Mr. (b) (6) you are looking at an original document which you brought here with you today; is that
  - 6 A. Yes, sir.

correct?

5

- 7 Q. Can you tell me when you obtained that document?
- 8 A. Yesterday.
- 9 0. When was that?
- 10 A. Bob brought it by the house and dropped it off.
- 11 Q. And that's Mr. Warren?
- 12 A. Yes, sir.
- 13 Q. When was that? When did he bring it by?
- '14 A. Yesterday morning.
- 15 Q. Did -- Strike that.
- I would like you now to refer, if you would,
  actually to the copy of this document which is Exhibit 5,
  so there can be no question about what you are looking at.

MR. WARREN: Okay.

- THE WITNESS: Okay.
- Q. (By Mr. Wheeler) After you received Exhibit 5 or the original of Exhibit 5 did you read it?
- 23 A. Yes, sir. I read through it.
- Q. Do you remember -- Strike that.
- Did you participate in an interview with the

```
1
      Environmental Protection Agency on December 11, 1985?
      Α.
 2
             Yes, sir.
             In reviewing the transcript did you find any errors
 3
      Q.
      or inaccuracies?
 5
      Α.
             Yes.
 6
      Q.
             Would you tell me what those are, please, sir, and
 7
      reference it by page?
 8
      Α.
             Well --
                   MR. WARREN:
 9
                                 I think it is 7 and 8.
                   THE WITNESS: Yeah. Where they have got
10
              down here, they -- she had (D)(6)
                                                  instead of
11
12
             (By Mr. Wheeler) And that's Page 7, Line 23, sir?
13
      0.
             Yes, sir.
14
      Α.
15
             And are those your initials "NRR" beside that?
      0.
16
      Α.
             Yes, sir.
17
      Q.
             Did you put your initials on yesterday?
                  I put those on after I read the -- this out
18
      Α.
19
      at -- after they got through taking the interview.
20
      Q.
             And that was in 1985 or shortly after 1985?
21
      Α.
             Yes, sir.
22
             Are there any other corrections, to your knowledge,
      Q.
23
      in this document?
                                               she had (b) (6)
24
             If I can find it.
```

- 1 Q. That's on Page 22, Line 23?
- 2 A. Yes, sir.
- 3 Q. And that (b)(6) is in your writing; is that
- 4 | correct?
- 5 A. Yes, sir.
- 6 Q. Are those your initials?
- 7 A. Yes, sir.
- 8 Q. When did you place that writing on this document?
- 9 A. Right after the interview.
- 10 Q. So you reviewed this document at a time -- near in
- 11 time to the interview; is that correct?
- 12 A. Yes, sir.
- 13 Q. At the time you initially reviewed this document,
- other than those two corrections, did you have -- did you
- 15 | find any other inaccuracies in this document with respect
- 16 to the questions asked?
- 17 A. Well, yes, but I just couldn't remember all the
- 18 names of the chemicals that we handled. I couldn't
- 19 | remember them. That's the only --
- 20 Q. So that is the only diff-- That's the only
- 21 | additional information?
- 22 A. Yes.
- 23 Q. Were the answers that you gave to the questions
- 24 | posed at this interview in 1985 true and correct at the
- 25 | time you made them?

- 1 A. As far as I -- As far as I know. I had just got
- 2 out of the hospital from back surgery. As far as I know,
- 3 | that's -- it is.
- 4 Q. To your -- Strike that.
- 5 Are these answers -- Are your answers to the
- 6 questions posed true and accurate as of today?
- 7 A. Yes, sir.
- 8 Q. Apart from the list of chemicals which you worked
- 9 with, is there anything you would add to this testimony
- 10 today, if I asked you these questions and you were
- 11 testifying?
- MR. WARNER: Object: leading; no foundation;
- 13 | calls for a narrative statement.
- 14 Q. (By Mr. Wheeler) You can answer the question.
- 15 A. I don't really know.
- 16 Q. Would you need to read through this document before
- 17 | you could tell me?
- 18 A. No. Most of -- All of what I have got here is true
- 19 to my -- to the best of my knowledge.
- 20 Q. So if I asked you these questions, these are
- 21 answers that you would give me if you were under oath --
- 22 A. Yes, sir.
- 23 Q. -- is that correct?
- 24 A. Yes, sir.
- MR. WHEELER: Why don't we take a short

```
1
     break? We have been going for about 45 minutes. It is
      two minutes after 4:00.
 2
 3
                    (Recess.)
                   MR. WHEELER: Let's go back on the record.
 4
 5
     It is 4:09.
 6
                   THE VIDEOGRAPHER:
                                       You might want to say that
     again as soon as I get everything going here.
 7
                   (Discussion off the record.)
 8
9
                   MR. WHEELER: Let's go back on the record.
      It is 4:10 p.m. now, and I just have a couple of more
10
     questions of (b) (6)
11
             You have -- I believe you have brought some
12
      medication with you today; is that correct?
13
             Yes, sir.
14
      Α.
             Have you taken that medication during your
15
      Q.
16
      deposition today?
             Only -- Yes, sir.
17
      Α.
             Did you take some before you came here this
18
      ο.
19
      morning?
             Yes, sir.
20
      Α.
21
             And did you take some at lunchtime?
      0.
             Yes, sir.
22
     Α.
             What medication did you take today?
23
      0.
```

Do you -- Strike that.

24

25

Α.

Q.

```
Did the medication you take affect your
 1
 2
      ability to testify here today in any way, to your
 3
      knowledge?
             No, sir. This is -- This is for
 4
      Α.
 5
                       Also
                                                                 Ι
 6
      didn't take this --
                                  is for
 7
                   And
 8
      Q.
             You are not taking any pain medication, though; is
      that correct?
 9
10
      Α.
             Yes, sir.
             What is that?
11
      0.
12
      Α.
             Have you taken any other medication?
13
      Q.
14
                        That's for my
      A.
             Anything else?
15
      0.
             That's it. That's enough.
16
      Α.
                   (Discussion off the record.)
17
             (By Mr. Wheeler) (b) (6) I believe you
18
      Q.
19
      testified previously about the occasion on which your
20
      clothes were exposed -- you were splashed with some
21
      chemical, whose name escapes me for the moment --
             OCBA.
22
      Α.
23
             -- OCBA, and you went home and went in the house
      Q.
24
      and then had to go outside and --
25
      Α.
             Yes, sir.
```

-- take your clothes off; is that correct? 1 Q. Yes, sir. Woke my family up. They couldn't 2 Α. breathe or anything. They were choking and tears and 3 13 their nose was running, and tears. They couldn't hardly 4 5 breathe. Were there any other occasions on which members of 6 ٥. your family had a negative effect or an adverse effect to 7 8 your clothing? I think that material on my clothing -- I worked in 9 it all the time, you know, and I would come home and it 10 11 would be on my clothing. It would be washed in the same 12 clothes as theirs and all, so my whole family developed 13 the same kind of symptoms I did. When did your family develop those symptoms? 14 0. 15 Α. During the time I worked for Northrop. And that's during the late 1960s; is that correct? 16 0. 17 Α. Yes, sir. 18 Q. What sort of symptoms did your family develop? b) (6) 19 20 21 22 Q. And this is -- When you say "they," is that your 23 24 Α. 25 MR. WARREN: Can we get the names on the

```
1
      record?
 2
                    MR. WHEELER:
                                   Yes.
 3
      0.
             Can you state the name of your (b) (6)
             (b)(6) name is (b)(6)
      Α.
 5
             And can you state the name of your
      0.
 6
      please.
 7
      Α.
             Do you want their names then or what their names is
 8
      now?
             Just the first names will be fine.
 9
      Q.
10
                                               The
      Α.
               is (b) (6)
      (b) (6)
11
             When you quit working at Chemtronics did your
12
      Q.
      rashes reduce in number and amount?
13
14
      Α.
             No, sir.
15
             How about your family?
      0.
16
      Α.
             They still had problems. We all still have
17
      problems.
18
      ο.
             Did the problems diminish in any way for your
19
      family?
20
      Α.
             No, sir.
21
             Prior to your working at Northrop did your
      Q.
22
                have any history of having rashes?
23
             No, sir.
      Α.
             Did your (b) (6) have a history of having rashes?
24
      0.
25
             No, sir, nor me.
      Α.
```

- 1 Q. Did you ever think about not wearing your clothes
- 2 home that you were working in because of the effects on
- 3 your family?
- 4 A. Well, that's -- Even if you left your clothes down
- 5 | there in the locker, you would still get the material on
- 6 them. We only -- Most everybody that worked there wore
- 7 their street clothes under their coveralls.
- The only thing we changed was we took our --
- 9 What belonged to Northrop, we left it there, and wore our
- 10 street clothes and shoes home.
- 11 Q. Did anyone at Northrop ever talk to employees about
- 12 | having chemicals in their clothing? Anyone ever warn you
- 13 | about that?
- 14 A. Yeah. A lot of them that worked up in CS would --
- their families would complain. They would tell us, you
- 16 know -- just having conversation and stuff, they would
- 17 | tell us about how they would go home and run their family
- 18 out of the house.
- 19 Q. But did any Northrop officials ever talk to you
- 20 about the problem?
- 21 A. No.
- 22 Q. Did you ever tell any of your supervisors about the
- 23 problems your family was having?
- 24 A. No, sir.
- 25 Q. Do you know if anyone complained about problems

- 1 their families were having?
- 2 A. No, sir.
- 3 Q. You don't know if anyone complained?
- 4 A. I don't know if anyone complained about it.
- 5 (Discussion off the record.)
- 6 MR. WHEELER: I have no further questions.
- 7 MR. GOLD: I have no questions.
  - MR. LANE: No questions here.

## EXAMINATION

10 BY MR. COLVIG:

8

- 11 Q. I just have a few, (6)(6)
- 12 You mentioned early on in the deposition that
- 13 | you may have had use of surgical masks at one time or
- 14 another. Did you ever use them, yourself?
- 15 A. Yes, sir.
- 16 O. Under what circumstances?
- 17 A. When we would take stuff into the CS building where
- they were making CS, CS-2, we would put them on and go in,
- 19 but they didn't do any good.
- 20 Q. The time that you hauled away some of the
- 21 | contaminated BZ material, do you know whether it had been
- 22 treated in any way?
- 23 A. No, it hadn't been treated.
- Q. You also testified about some trips you took to
- 25 some offsite landfills, the Tropigas site off of

- 1 Highway 70, the Buckeye Cove site and the Beacon dumping
- 2 ground. At any of those sites did you have some check-in
- 3 | with anybody before you dumped anything there?
- 4 A. No, sir.
- 5 Q. Did you have to pay anything?
- 6 A. No, sir.
- 7 Q. Do you know whether Building 113 had a floor drain?
- 8 A. Yeah, I think -- I am pretty sure it did have a
- 9 floor drain because they would hose it down.
- 10 Q. Did you ever see them hose it down?
- ll A. Yes, sir.
- 12 Q. How often did they hose it down?
- 13 A. They would hose it down after every shift. They
- 14 | would clean the building after every shift.
- 15 O. Do you know where that drain went to?
- 16 A. Into the creek.
- 17 Q. How do you know it went into the creek?
- 18 A. You could see it going down. You could also smell
- 19 | it.
- 20 Q. Did you ever see water flowing into any of the
- 21 | burning trenches?
- 22 A. Only when it rained.
- 23 Q. You did see rain run-off running into the burning
- 24 trenches?
- 25 A. Yes, sir.

```
Did you ever see water flowing into the liquid
 1
      Q.
 2
      dumping trench?
             Yes, sir. It had to go into it, if it rained.
 3
      Α.
             From rain run-off?
      Q.
 5
      Α.
             Yes.
             Did you ever see water running out of those
 6
      Q.
      ditches?
 7
 8
             No, sir.
      Α.
             Did you ever see anybody testing the quality of the
 9
      Q.
10
      air at the site?
11
      Α.
             No, sir.
12
             Did you ever hear from anybody that anybody had
      0.
13
      ever done that?
14
      Α.
             No, sir.
15
             Have you ever heard of a William Harper?
      Q.
             No, sir.
16
      Α.
17
                   MR. COLVIG: Thank you. That's all I have.
18
                   MR. WHEELER: I actually have two more
19
      questions, if I may.
20
                   Do you mind?
21
                   MR. SEIFE: I have no questions.
22
                        EXAMINATION (Resumed)
```

I would like to go back for a moment to the burning

I believe you testified at the

23

24

25

Q.

BY MR. WHEELER:

ground, (b) (6)

- bottom or base of the burning ground there was a burial
  trench of some kind; is that correct?
- A. Yes.
- 4 Q. Can you tell me what was buried in that trench?
- 5 A. When Northrop was winding down and fixing to close
- down their operation they had two trenches dug down at the
- 7 | bottom of the burning ground. The lower road that went
- 8 | into the bottom of the burning ground was level with the
- 9 | road. The bulldozer came in and dug two trenches, maybe
- 10 | 100 yards long, about the same size as the burning ditch.
- We would haul the OCBA up on the truck and
- 12 | set it off into these ditches, two side by side, two high.
- 13 And they covered it up with four feet of dirt on top of
- 14 those.
- Now, when me and (b) (6) went back out
- 16 to point out all these dump sites to the EPA and we turned
- in off the road to the burning ground, it was not level
- 18 like it would be when we was there before. They had
- 19 scraped the burning ground, and there was about 30 feet of
- 20 dirt on top of the original ditch.
- 21 Q. Okay. Now I would like to --
- 22 A. We told them that they would have to -- In order to
- 23 | find those drums, they would have to go about 30-35 feet
- 24 deep, so they missed those two.
- Q. Can you tell me what understanding, if any, you had

- l | as to why those barrels with being buried?
- 2 A. They probably didn't want to ship them back to the
- 3 | company, is all I know.
- 4 Q. Did you personally know that?
- 5 A. No, I didn't know that. I just know that we took
- 6 them up there, set them off in the ditches and they
- 7 covered them up.
- 8 Q. Were these new barrels?
- 9 A. Yes, sir.
- 10 Q. So these were barrels that came from the
- ll manufacturer?
- 12 A. And they were full.
- 13 Q. And, to your knowledge, they had not been emptied?
- 14 A. They were full. They are still full, if they are
- 15 not rotted away.
- 16 Q. Did anyone ever tell you why those barrels with
- 17 being buried?
- 18 A. Just that the programs were over and that was --
- 19 they were getting rid of all the material.
- Q. Who was it who told you that?
- 21 A. I don't remember now.
- Q. But you do remember being told that; is that
- 23 | correct?
- 24 A. Yes.
- Q. And this OCBA was used in the CS program; is that

1 correct? 2 Yes, sir. 3 I believe you testified there were some other barrels besides those OCBA; is that correct? 5 Α. Probably the MN, but all I hauled up were OCBA. 6 There was probably some MN in there. All I hauled up was 7 OCBA, and we would stack it in the ditch two high. 8 Were those barrels from a particular area that you 0. 9 hauled up? 10 Yes, sir, the storage area where we kept the drums of OCBA. 11 12 So that was the area where materials that would be 0. 13 delivered to production were kept; is that correct? 14 Α. Yes. 15 MR. WHEELER: I have no further questions. 16 MR. WARNER: Let's take a 10-minute break. 17 (Recess.) 18 MR. GOLD: It is 4:24 p.m. 19 MR. COLVIG: All right. We are back on the 20 record. It is 4:39. 21 EXAMINATION (Resumed) 22 BY MR. COLVIG: 23 did you ever dispose of CS into the Q. 24 burning trench? 25 Α. Yes, sir.

- Q. In what form?
- 2 A. In the rejected bags that was torn -- or they
- 3 | couldn't be shipped off. They would put them in the
- 4 trash. And a lot of the open drums on the outside would
- 5 have CS in them. They would sit out in the weather and
- 6 get wet and make clunks, hard clunks. We would take it up
- 7 and dump it off into the burning ditch.
- 8 Q. Did you ever see CS being burned in the trench?
- 9 A. Well, it had to be burned when they burned it,
- 10 because we had put it into the burning ditch, so it would
- ll have to be burned whenever they burned the other stuff.
- 12 Q. After you had burned the debris in the burning
- 13 | trench what did what was left look like?
- 14 A. Just white ash.
- 15 Q. Were there clumps of anything? Was it completely
- 16 burned?
- 17 A. No. It would -- The flares would make it so hot it
- 18 | would melt. Even if there was metal in the burning ditch
- 19 | it would melt the metal. It was intense heat.
- MR. COLVIG: Thank you.
- 21 EXAMINATION
- 22 BY MR. WARNER:
- 23 [Q. (b)(6) as I announced earlier, I am Glenn
- 24 Warner. I represent Northrop Corporation. I would like
- 25 | to visit with you briefly, and I hope quite briefly.

- First, if I may invite your attention to your
  testimony about your hauling full barrels of OCBA to those
  two trenches that were dug at the burning grounds, do you
  recall that?
- 5 A. Yes, sir.
- 6 Q. How many barrels did you haul and put in those
- 7 trenches?
- 8 A. I don't -- I didn't count them.
- 9 Q. How many days did you devote to that job?
- 10 A. Maybe two days.
- 11 Q. Who helped you?
- 12 A. (b) (6)
- Q. The two of you made each delivery without any further assistance from anyone else; is that correct?
- 15 A. What do you mean?
- Q. You and he were the only people involved, to your knowledge, in hauling those full barrels of OCBA from the
- warehouse to those two trenches; is that correct?
- 19 A. I don't know if was hauling up there with
  20 us or not, but there was several that hauled up there that
  21 worked in production control. The materialmen hauled up
- there and set them off into the ditch.
- Q. I am now talking, and as are you, about only the barrels that were full of OCBA; right?
- 25 A. That's right.

- 1 Q. And you have told me that you and (b)(6)

  2 it -
  3 What was his name?

  4 A. (b)(6)
- Q. -- devoted two days to that job.
- 6 A. Probably two days or more.
- 7 Q. How many barrels did you put on each truckload?
- 8 A. I don't remember. It was a big truck.
- 9 Q. Those were 55-gallon barrels?
- 10 A. 55-gallon barrels.
- 11 Q. Each full of OCBA?
- 12 A. Yes, sir.
- 13 Q. Were there 20 barrels to a truck?
- 14 A. Probably 20 or more.
- 15 Q. How did you load them on the truck?
- 16 A. With the Hyster.
- 17 Q. And how did you unload them into the ditch?
- 18 A. Unloaded them off of the truck with a Hyster and
- 19 then we would roll them off into the ditch.
- 20 Q. And the two of you would then stack them two deep
- 21 | in the ditch, is that correct?
- 22 A. No. There were more people up there working.
- Q. Who helped stack in the ditch?
- 24 A. Yes, sir.
- 25 | Q. How many truckloads a day did you run?

- 1 A. I couldn't say for sure.
- Q. Was it more than five?
  - A. Probably four or five.
- Q. Did you put those barrels that you put into the ditches in only one ditch, or did you put them in both
- 6 ditches?

himself?

3

8

9

- 7 A. The ones we hauled up we put in the lower ditch.
  - Q. How much space did they take up in that ditch in terms of length?
- MR. WHEELER: Objection. The question is ambiguous. Are you speaking of barrels that he unloaded,
- MR. WARNER: That is correct.
- MR. WHEELER: Okay. So it is limited to
- barrels that (b) (6) unloaded; is that correct?
- MR. WARNER: That is equally correct.
- 17 THE WITNESS: How many barrels did I unload?
- 18 Q. (By Mr. Warner) How much space did the barrels
  19 take up in length, the number of feet in the ditch?
- 20 A. Maybe four or five feet.
- MR. WARREB: Per barrel? Is that --
- THE WITNESS: Two barrels side by side took
- 23 up about four, maybe four-and-a-half feet.
- Q. (By Mr. Warner) Very well. How many feet of ditch
- 25 did you fill with barrels, then?

- We filled the whole ditch with barrels. 1 Α. 2 0. All 300 feet? That's a guess of how long the ditch was. 3 Α. And you did that -ο. I didn't measure that. 5 Α. 6 Q. Forgive me for interrupting. 7 And you did that in two days? 8 Two or three days. It has been twenty-some years. Α. 9 Q. I appreciate that. 10 As I understood your testimony, (b) (6) you made one trip each to each of the offsite landfill 11 12 dumps during the five years or more that you were employed at Northrop? 13 MR. WHEELER: Objection: 14 misstates his 15 testimony. 16 Join. MR. GOLD: 17 Q. (By Mr. Warner) Is that not correct; is that so? 18 Α. Could you repeat the question? 19 MR. WARNER: Would you read it back, please? 20 (The pending question was read by the
- MR. WHEELER: Also object to the question as
  ambiguous, because it is not limited to whether just
  places he visited or all landfills that were used by
  personnel at Northrop.

reporter.)

I will withdraw the question and 1 MR. WARNER: 2 reframe it. 3 0. You went to the Tropigas fill on U. S. 70 only 4 once? 5 Α. Once. You went to the Beacon landfill twice; is that 6 Q. 7 correct? To the best of my knowledge. 8 Α. 9 And you went to the Buckeye Cove fill only once; is 0. 10 that correct? 11 I think so. I am not for sure. It could have been Α. 12 twice. But when you testified first you said once, did you 13 Q. 14 not? 15 Α. Yes. 16 You also testified that there might have been one 0. 17 other landfill that you went to, but you can't remember 18 its name or where it is. 19 Or the location. Α. 20 During the six months that you were doing only Q. 21 waste disposal, not accompanied by anyone else, did you go 22 to any of those landfills? 23 MR. SEIFE: Objection: mischaracterizes the 24 witness's testimony.

16

25

MR. WARNER: If so, I apologize to the

- l witness.
- 2 Q. Was it correct that during the first six months
- 3 that you were at -- you were employed by Northrop that you
- 4 | were involved in waste disposal activities?
- 5 A. At where?
- 6 Q. Northrop.
- 7 A. I didn't understand your question.
- 8 Q. Let me rephrase it. And forgive me. I will
- 9 attempt to be accurate for your benefit, as well as mine.
- During the first six months or the first six
- ll to eight months that you were employed at Northrop you did
- work on the trash detail, did you not?
- 13 A. I worked some on the trash detail.
- 14 O. But not --
- 15 A. Not every day.
- 16 Q. And not very much?
- 17 A. Not every day.
- 18 Q. At most, two days a week?
- 19 A. Probably.
- 20 Q. During that first six to eight months did you take
- 21 any trash to any landfill?
- 22 A. Yes.
- 23 Q. So that the trips to the landfills that you have
- 24 | testified to earlier and in talking to me were trips that
- 25 | you made during that first six to eight months?

- 1 A. Yes.
- 2 Q. The one time that you went to Tropigas was in the
- 3 | first six to eight months that you were working at
- 4 Northrop?
- 5 A. Yes.
- 6 Q. And the one time that you went to Buckeye Cove was
- 7 during the first six or eight months that you worked at
- 8 Northrop?
- 9 A. To the best of my ability.
- 10 Q. And the two times that you went to Beacon, the
- 11 Beacon landfill, were during the first six to eight months
- 12 | that you worked at Northrop?
- 13 A. No. It could have been later.
- 14 Q. What about this other landfill whose identity and
- 15 | location you can't remember?
- 16 A. I don't know. It could have been later in my
- 17 employment there.
- 18 Q. Or it could have been earlier?
- 19 A. It could have been earlier.
- 20 Q. During the first six to eight months?
- 21 A. It could have been.
- 22 Q. And, likewise, the Beacon landfill visit that you
- 23 | made, the two, could have been during the first six to
- 24 eight months?
- 25 A. It could have been.

```
1
             After that first six to eight months did the
      ٥.
 2
      frequency of your working on the trash detail increase so
      that you were doing it more than the two days a week or so
 3
 4
      that you did during the first six to eight months?
 5
                  It decreased. Like I say, (b) (6)
      Α.
             No.
 6
              bid on that job and they got it permanent.
 7
      They was the permanent men that hauled the trash off.
 8
             And that was the job that you didn't want?
      ο.
 9
      Α.
             I liked the job. I just didn't want it regular.
10
             How many days a week did you accompany (b) (6)
      0.
      and (b) (6)
11
                      on trash deliveries?
12
                   MR. WHEELER: Objection:
                                              compound.
                   MR. COLVIG: Also ambiguous as to what time.
13
14
                   MR. WARNER:
                                I will withdraw the question and
15
      reframe it.
16
             From the time that (b) (6)
                                         and (b) (6)
                                                           bid on
      0.
17
      and were awarded the trash disposal job, during an average
18
      week how many days did you accompany them, one or the
19
      other, on a trash disposal delivery?
20
                   MR. WHEELER: Objection: lacks foundation
21
      that there was an average week.
22
      ο.
             (By Mr. Warner) You may answer.
             I didn't go with them at a regular basis like that
23
      one day a week or anything like that. It could have been
24
```

two or three weeks between times when I would go.

- wasn't no set, certain time.
- 2 Q. And it could have been longer than two or three
- 3 | weeks?
- 4 A. It could have been. Just when they were short on
- 5 help, or they got behind, we helped out.
- 6 Q. And each time that you went with either (b) (6)
- 7 or (b)(6) it was to go to the burning grounds or to
- 8 the mountain where you have testified you dumped cans; is
- 9 | that right?
- 10 A. Not necessarily with (b) (6)
- 11 Q. You never went to a trash landfill with them, did
- 12 you?
- 13 A. A lot of times me and (b) (6) would take stuff
- 14 up on the mountain and throw it out. Like I say, the
- drums, we would throw them out.
- 16 Q. Very well. I thank you.
- 17 A. We would take -- We would take materials up to the
- 18 burning ground rather than the ditch.
- 19 Q. But that, again, no more often than once every
- 20 three weeks or something like that; correct?
- 21 A. That I would go with (b) (6)
- 22 Q. Yes. Was it more frequently than once every three
- weeks or so that you would go with (b)(5) to the
- 24 | burning ground?
- 25 A. Me and (b) (6) would go up to the burning ground

- 1 quite a lot. We would take the rejected flares up there
- 2 and put them in the ditch.
- 3 Q. Only rejected flares?
- 4 A. The men on the trash detail is the ones that would
- 5 burn them.
- 6 Q. Were your trips with (b) (6) to the burning
- 7 ground limited to taking rejected flares?
- 8 A. Rejected flares, yes, sir.
- 9 Q. But not trash?
- 10 A. We took some trash, too.
- 11 Q. At the same time that (b) (6)
- 12 | were collecting trash?
- 13 A. Yes, sir.
- 14 Q. You would help them by running a supplemental or
- 15 extra trash run?
- 16 A. No. We didn't help them like that. We -- What we
- 17 | would do is take the rejected candles up there and put
- 18 them in the ditch, and the material that was rejected,
- 19 like the star tubes and stuff that was cardboard, inert
- 20 | material, we would take it up to the burning ground and
- 21 | place in the burning ditch.
- 22 Q. How frequently did you do that?
- 23 A. Maybe two or three times a week.
- 24 Q. How often were you -- How many times -- I will
- 25 | withdraw that question.

- How many times were you at the burning grounds when a burn was ignited?

  A. I couldn't say for sure. I have seen a lot of burning.
- 5 Q. While you were at the burning grounds?
- 6 A. Yes.
- 7 Q. And while you were in the bunker when they -- when
- 8 it was ignited?
- A. Let me put it this way: I didn't burn stuff all the time like you are implying. Like I said, when I was with (b)(6) on the trash detail, (b)(6) would do the burning. A lot of times we would be up around the burning ground when I would see it burning. We would be taking stuff up to the test area.

The test area was right there at the burning ground, and you could see it from where we was at.

- Q. I am attempting to find out how many times you actively took part in setting off a burn at the burning ground.
- A. The whole time I was there, maybe five times.
- 21 MR. WARNER: No further questions.
- MR. WHEELER: I have one brief question.

## 23 <u>EXAMINATION</u> (Resumed)

24 BY MR. WHEELER:

17

18

19

20

Q. I believe you testified earlier, (b)(6) that

- you and  $\binom{(b)(6)}{}$  worked on the second shift from time
- 2 to time; is that correct?
- 3 A. Yes, sir.
- Q. Did you do trash runs while you were on the second
- 5 | shift?

10

- A. No, sir, but we would take the rejects up to the
- 7 burning ground and put them in the burning ditch.
  - MR. WHEELER: I have no further questions.
- 9 MR. WARREN: I have one question.

#### EXAMINATION

- 11 BY MR. WARREN:
- 12 Q. (b) (6) if records exist that show some of the
- 13 | landfill you have been discussing not to have been opened
- 14 until after the first six or eight months when you were at
- Northrop, would you argue with the records, or would you
- 16 rely on your memory?
- 17 A. Well, I think I would argue with the records,
- 18 | because I know where we went.
- 19 Q. The question, I guess, is I am asking about the
- 20 | times for them, the dates.
- 21 A. The dates? I don't really know.
- 22 Q. I mean, it has been how long?
- 23 A. It has been twenty-some years.
- MR. WARREN: I don't have anything further.
- MR. WHEELER: Any further questions?

1	MR. WARNER: No questions. No more.
2	MR. WHEELER: At the previous deposition was
3	there an agreement, any agreement, as to how the witness
4	would review and sign the deposition?
5	MR. WARREN: We reserved signing and we
6	reserve signing with this deposition. We want to review
7	it and sign it.
8	MR. COLVIG: We had a special agreement for
9	that one because (b)(6) was about to enter the
10	hospital, and we gave him an extended time for signing.
11	MR. WARREN: No. I don't need an extended
12	time. I just meant that we do need the normal time,
13	30 days or whatever.
14	MR. GOLD: Can we have an agreement after
15	30 days, if it has not been signed, we can use the
16	deposition as if it has?
17	MR. WARREN: 30 days after receipt of the
18	transcript.
19	MR. GOLD: 30 days after receipt.
20	MR. WARREN: Fine.
21	MR. GOLD: No problem.
22	THE WITNESS: Is the interview over? I can't
23	say anything else?
24	MR. WARREN: No, sir.
25 .	THE WITNESS: Okay.

MR. WHEELER: Actually I would inquire of 1 Mr. Warner, can we forward the original of the deposition 2 s attorney for him to transmit to his 3 4 client for review? MR. WARNER: Certainly. 5 write on 6 MR. WHEELER: And can (6) (6) the deposition any corrections he wishes to make? 7 8 MR. WARNER: Yes. 9 MR. WHEELER: And can the deposition be executed under penalties of perjury under the laws of the 10 State of California by (b)(6) 11 MR. WARNER: So stipulated. 12 MR. WHEELER: Then I think this deposition is 13 14 concluded and it is now --15 MR. GOLD: 5:02. 16 (At 5:02 p.m. proceedings in the 17 above-entitled matter were concluded.) 18 ---000---19 20 21 22 23 24 25

1	I, (b)(6), have read the
2	foregoing 172 pages of testimony given by me on Tuesday,
3	May 16, 1989, in Asheville, North Carolina.
4	The testimony should be corrected as follows
5	PAGE LINE CORRECTION AND REASON THEREFOR
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	Subject to the foregoing corrections, my
<sub>_</sub> 16	testimony is as contained in the foregoing deposition.
17	Signed at,
18	this, 1989.
19	
20	(b) (6)
21	Subscribed to and sworn to
22	before me, this day of, 1989
23	
24	NOTARY PUBLIC
25	My Commission expires:

1 STATE OF NORTH CAROLINA 2 COUNTY OF BUNCOMBE ) SS. I, PATSY R. HEADLEY, a Notary Public for the 3 4 State of North Carolina, do hereby certify: 5 That on the 16th day of May, 1989, there 6 appeared before me, pursuant to Notice, (b) (6) 7 that the appearances were as shown in the caption 8 hereof; that the said deposition was taken at the time and 9 place indicated, commencing at 9:39 a.m.; that the said 10 witness was sworn by me to tell the truth, the whole 11 truth, and nothing but the truth in said cause; that the foregoing testimony was taken by me by computerized 12 13 Stenotypy and thereafter scoped and printed by me; and the 14 foregoing transcript is a true record of the testimony 15 given by the witness; that the witness has been requested 16 to read and sign the deposition; that I am not of kin or 17 in any wise associated with any of the parties to said 18 cause, or their counsel, and that I am not interested in 19 the event thereof. 20 WITNESS my hand and official seal this 24th 21 day of May, 1989. 22 23

My Commission expires September 20, 1991

24

# SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE COUNTY OF LOS ANGELES

NORTHROP CORPORATION, Case No. 556129

Plaintiff, Strain S

### VIDEO-TAPE DEPOSITION OF (b) (6)

I, TRACY FAGAN, video technician for the firm of TRANSCRIPTS PLUS, do hereby certify that I have accurately taken the video-tape recording of the above-captioned matter. I further certify that this deposition was taken on May 16, 1989, at Asheville, North Carolina, consisting of two tapes; that no alterations, additions or deletions were made thereto; and further that I am not a relative or employee of either party and have no interest whatsoever in this action.

This 25th day of May, 1989.

TRACY FAGAN

Sworn to and subscribed before me this 25th day of May, 1989.

this 25th day of May, 1989

My Commission expires September 20, 1991

# PRODUCTION RECORDS



DATE	PROCESS 45/
9-20-68- 5-27-69	Pressing of candles (Battlefield Illuminating Flares
10-13-68-9-12-69	Stripping RDX Pressing RDX Lacquer Batching for C-4 Pressing C-4 40 mm assemblies Manufacture of C-4 Pressing of black powder pellets Distillation of Acetone & Toluene Recrystallized RDX from Acetone Screening of A-3 CX/Sodium Picrate mix for grenades Sodium Picrate manufactur Pressing tetryl pellets Pressing of BFI pellets Pressing of BFI pellets Manufacture of DATB DATB/PBX
6-12-67 - 8-20-68	DATB CS - manufacture and blending/grinding Fritz Mill blender
7-72 - 12-73	Ammonium Picrate Blending LCA Powder PM 1024 Painted and stenciled cans Soldering of cans Zinc dibenzoate TPT DART TMB
4-17-70 - 6-29-72	LCA Pellets DATB CS TPT BKN03 Pellets PBX Pressing of Sodium Picrate Eastman PM 1024 Mark 24 illuminating flares Guanidine nitrate ADBN Burning of "T" Zinc Dibenzoate Ammonium Picrate

DATE PROCESS

NOTE: Burial of drums at Burning Ground called out on 4/21/71 - 4/28/71. Burial of explosive ditch. Burial of lab (104) clean-up materials - 40 mm rounds on 5/4/71. Destruction of Lead Styphnate, lead azide, PETN and electric squibs.

Following notation noted in the log book on 3/27/72

"Chemtronics

Old Bee Tree Road

Swannanoa, N.C. 28778"

9-29-68 - C-4 8-7-73 DATB

11-25-68 - CS

4-16-70

2-1-67

8-20-68 - CS

4-25-69 (Dumping reclaimed solvent)

5-22-67 - HEI 4-24-68 LCA

CS-1

Tetryl pellets

RDX (Raytheon) Pellets

Drummed lacquer

RDX/A1 DATB PBX

(Caustic/MeoH added to sump tank at 113 for CS - DATB - separated spent acid and washes from EDC sodium nitrate dried and granulated)

RAW MATERIALS

Boron

Toluene

Acetone

Methanol

Cyclohexane

SODIUM NITRATE

Potassium Nitrate

7-26-66 - Mark 24 Flares

CS Grenades & CS production

LCA powder pellets

C-3 lacquer batch

RDX in C-3 lacquer base

Stripping of A-3 PBX synthesis Tetryl pellets

DATB synthesis Slider Detonators

Prima cord

Kel-F

NEI powder

(Al/RDX, Barium nitrate, graphite, gilsonite)

RDX Pellets OCBA drums

Talc Grenades

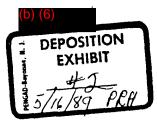
\*(Ethylene dichloride leak (BK2,pg.54) 10/5/66 - sump and drain cleaning - DATB sump @ 113 (pg 116) leaking back inside building.

DATE	PROCESS	RAW MATERIAL
1-19-66 - 7-21-66	Mark 24 Flares Al/RDX mixing 7 pressing into pellets LCA candles Tetryl pellets *(Laminac and contaminated DDM sent to burning ground) CS grenades HMX BZ production Fuze assembly NEI powder	Caustic Cyclohexane Methanol Tetranitro-carbazol
11-23-72 - 3-31-75	Picrate Zinc dibenzoate	
12-14-73 - 3-8-74	TMB DATB Picrate Dinitroaniline HNX Picryl sulfone Picryl chloride PBX Styphnic Acid *(dumping spent HNS, acetone, DA	YF in burning ditch)
11-22-68 - 10-24-72	DATB PBX	
4-28-69 - 11-25-70	CS	
4-25-68 - 10-12-68	CS Raytheon pellets Distilled acetone	RDX Silica gel Acetone toluene
3-9-67 9-28-68	DATB C-4	Nitric Ammonia Cyclohexane
9-6-66 3-8-67	C-3 DATB PBX *(hauled lacquer to burning groun (hauled empty acid drums to top	
5-19-73 - 6-22-78	Dart Ammonium picrate HNS II 462 TMB AAB HNS I 5-bromo vanillin *(tankers to leach pits)	Acetic Acid Nitric Chromic Bromine Cyclohexane

DATE	PROCESS	RAW MATERIALS
12-20-75 - 12-06-77	TMB BCL-462 5-bromo vanillin Aminoazobenzene (AAB)	Bromine Vanillin Acetic Acid Copper sulfate 4 VCH Cyclohexane TBA Methanol Solvent Ammonia H <sub>2</sub> O Nitric Acid
4-3-75 - 2-7-77	DATB Zinc dibenzoate 1024 B PBX-B BUX *(hauled tankers spent acid to pits on burning ground	Sulfuric Ammonia EDC ETC12 Nitric Bu Jl Nylon Lacquer Japanese Benzoic Acid Propronic acid R.D.E. Acetic Acid o-phenyl phenol Benzyl chloride ZNC12
12-08-77 <b>-</b> 3-28-79	1024 Styphnic acid AAB 1024 DNBA Aminoazobenzene PBX M-NBA-3	Acetic Acid Nitric EDC Resorcinol Muriatic acid Sodium nitrate Acetone (distilled) Aniline 1023 ammonia
2-21-77 - 6-30-79	1024 BUX (Benzyl O-phenyl phenol) nitro secondary butyl benzene Zinc dibenzoate (#tanker to burning ground)	O-phenyl phenol benzyl chloride nitrogen TMB Cu sulfate Acetic Acid Benzoic acid
6-29-79 - 9-13-79	ZB 462 *(emptied tanker to lagoon- hauled filtrate to burning ground	Cyclohexane Methanol Bromine T.B.A. VCH

# 000536

# PRODUCTION RECORDS



DATE	PROCESS
9-20-68- 5-27-69	Pressing of candles (Battlefield Illuminating Flares
10-13-68-9-12-69	CS Stripping RDX Pressing RDX Lacquer Batching for C-4 Pressing C-4 40 mm assemblies Manufacture of C-4 Pressing of black powder pellets Distillation of Acetone & Toluene Recrystallized RDX from Acetone Screening of A-3 CX/Sodium Picrate mix for grenades Sodium Picrate manufactur Pressing tetryl pellets Pressing of BFI pellets Pressing of BFI pellets Manufacture of DATB DATB/PBX
6-12-67 - 8-20-68	DATB CS - manufacture and blending/grinding Fritz Mill blender
7-72 - 12-73	Ammonium Picrate Blending LCA Powder PM 1024 Painted and stenciled cans Soldering of cans Zinc dibenzoate TPT DART TMB
4-17-70 - 6-29-72	LCA Pellets DATB CS TPT BKN03 Pellets PBX Pressing of Sodium Picrate Eastman PM 1024 Mark 24 illuminating flares Guanidine nitrate ADBN Burning of "T" Zinc Dibenzoate

Ammonium Picrate

**PROCESS** DATE

> NOTE: Burial of drums at Burning Ground called out on 4/21/71 -4/28/71. Burial of explosive ditch. Burial of lab (104) clean-up materials - 40 mm rounds on 5/4/71. Destruction of Lead Styphnate, lead azide, PETN and electric squibs.

Following notation noted in the log book on 3/27/72 "Chemtronics

Old Bee Tree Road Swannanoa, N.C. 28778"

9-29-68 -8-7-73 DATB 11-25-68 -4-16-70

8-20-68 -CS 4-25-69 (Dumping reclaimed solvent)

5-22-67 -HEI 4-24-68 LCA (CS-1) SO Tetryl pellets RDX (Raytheon) Pellets) W = Drummed lacquer RDX/AI

DATB\* PBX

(Caustic/MeoH added to sump tank at 113 for CS - DATB - separated spent acid and washes from EDC sodium nitrate dried and granulated)

RAW MATERIALS

Boron S O

Toluene L O Acetone \_ O

Methanol - 0

Cyclohexane -

SODIUM NITRATE S

Potassium Nitrate 😕

7-26-66 -Mark 24 Flares 2-1-67 CS Grenades & CS production LCA powder pellets C-3 lacquer batch RDX in C-3 lacquer base (Stripping of A-3) N =

(PBX synthesis) N > Tetryl pellets DATE synthesis 5

Slider Detonators

Prima cord Kel-F

NEI powder

(Al/RDX, Barium nitrate, graphite, gilsonite)

RDX Pellets

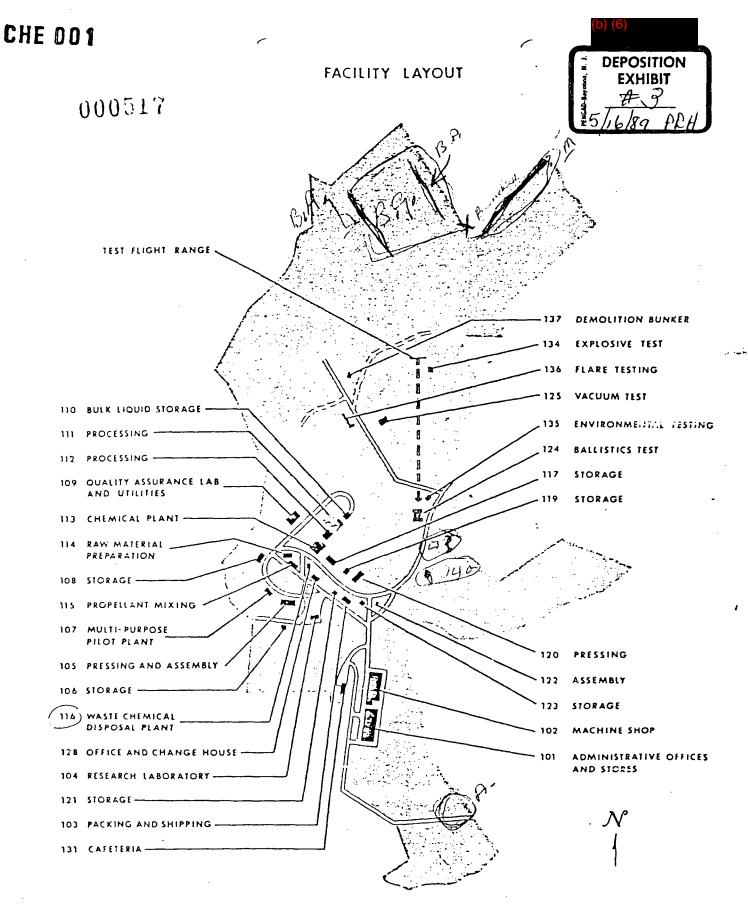
(OCBA drums of LO Talc Grenades

\*(Ethylene dichloride leak (BK2,pg.54), N L O 10/5/66 - sump and drain cleaning - DATB sump @ 113 (pg 116) leaking back inside building.

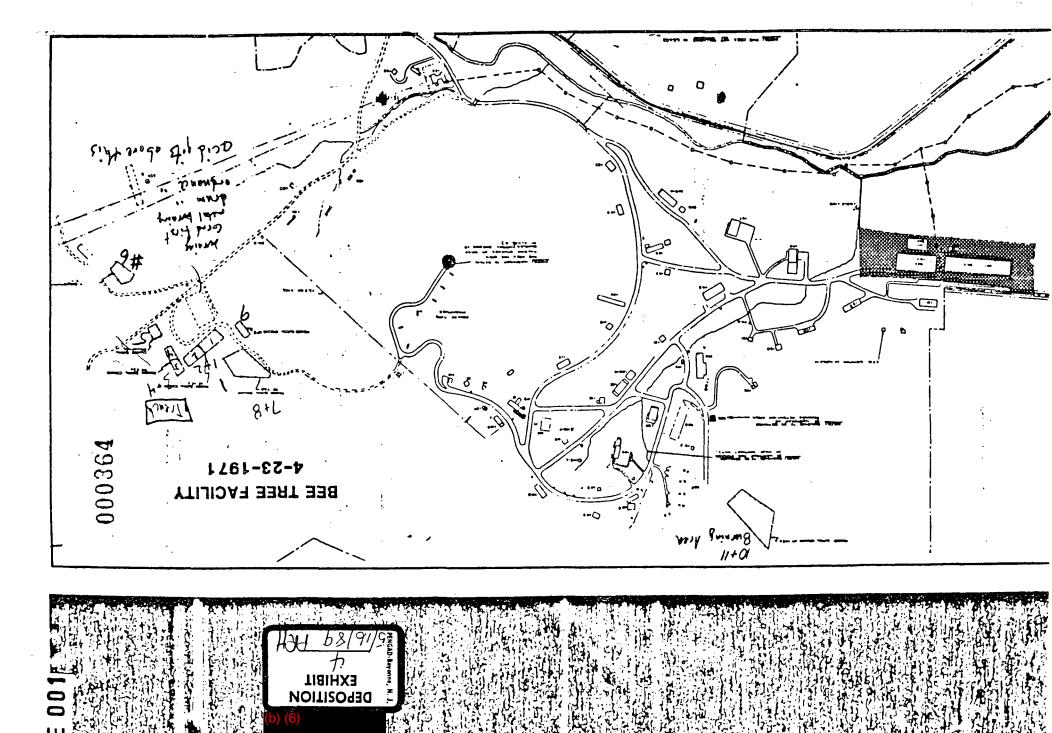
5-bromo vanillin

\*(tankers to leach pits)

DATE	PROCESS	RAW MATERIALS
12-20-75 - 12-06-77	TMB BCL-462 5-bromo vanillin Aminoazobenzene (AAB)	Bromine Vanillin Acetic Acid Copper sulfate 4 VCH Cyclohexane TBA Methanol Solvent Ammonia H <sub>2</sub> 0 Niţric Acid
4-3-75 - 2-7-77	DATB Zinc dibenzoate 1024 B PBX-B BUX *(hauled tankers spent acid to pits on burning ground	Sulfuric Ammonia  EDC  ETCl2  Nitric  Bu Jl  Nylon  Lacquer  Japanese Benzoic Acid  Propronic acid  R.D.E.  Acetic Acid  o-phenyl phenol  Benzyl chloride  ZNCl2
12-08-77 - 3-28-79	1024 Styphnic acid AAB 1024 DNBA Aminoazobenzene PBX M-NBA-3	Acetic Acid Nitric EDC Resorcinol Muriatic acid Sodium nitrate Acetone (distilled) Aniline 1023 ammonia
2-21-77 - 6-30-79	1024 BUX (Benzyl O-phenyl phenol) nitro secondary butyl benzene Zinc dibenzoate (#tanker to burning ground)	O-phenyl phenol benzyl chloride nitrogen TMB Cu sulfate Acetic Acid Benzoic acid
6-29-79 <b>-</b> 9-13-79	ZB 462 *(emptied tanker to lagoon-hauled filtrate to burning ground	Cyclohexane Methanol Bromine T.B.A. VCH



NORTHROP CARDLINA, INC.



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IV DOCKET NO.: 86-03-C

In the matter of:

Chemtronics Site

Swannanoa Valley Medical Center Swannanoa, North Carolina 11 December 1985

Northrop Corporation 1800 Century Park East Los Angeles, California

Chemtronics, Inc. 180 Old Bee Tree Road Swannanoa, North Carolina

Respondents.

# ATTENDING:

JON K. BORNHOLM Environmental Engineer 345 Courtland Street Atlanta, Georgia

JOHN F. SCHULTHEIS, President Chemtronics, Inc. 180 Old Bee Tree Road Swannanoa, North Carolina

FELICE F. JOHNSON Chemtronics, Inc. 180 Old Bee Tree Road Swannanoa, North Carolina

DR. GARY SERIO Northrop Corporation 1800 Century Park East Los Angeles, California

CHARLES D. CASE, ESQUIRE Moore, Van Allen, Allen & Thigpen 200 W. Morgan Post Office Box 26507 Raleigh, North Carolina INTERVIEW OF:

(b) (6)





National Reporting Service 108 College Street, Suite 204 Asheville, NC 28801 (704) 254-9230



# ATTENDING:

EUGENE C. MCCALL, ESQUIRE 2614 Burney Drive Post Office Box 5761 Columbia, South Carolina

BOB WARREN, ESQUIRE 117D Cherry Street Black Mountain, North Carolina

ANTHONY L. YOUNG, ESQUIRE Wald, Harkrader & Ross 1300 Nineteenth Street, N.W. Washington, D.C.

REPORTED BY: Rebecca Padgett Harris, Notary Public



National Reporting Service 108 College Street, Suite 204 Asheville, NC 28801 (704) 254-9230



did agree that both the 1 reading over and signing of the transcript are 2 hereby reserved. 3 EXAMINATION BY MR. JON BORNHOLM: 4 could you just state your name and your 5 age? 6 7 And your address and telephone? Q 8 Α 9 Well, I gave you the wrong phone number there, (b) (6) 10 Could you give us the approximate months and 11 years that you were employed at the Chemtronics 12 Site? 13 I went to work for Northrop in June of 1966 and 1.1 15 was laid off -- no, I wasn't laid off from Northrop, I switched over to Chemtronics. I was 16 17 laid off from Chemtronics in about April or May 18 of 1971. Can you give us a brief description of your 19 duties or responsibilities when you were working 20 for both Northrop and for Chemtronics? 21 I was a material handler working for Northrop 22Carolina, supplied all materials to all the 23

buildings for what programs they were working

We seen that all the different programs

2.1

25

were going all right and kept them furnished 1 with the material to build the programs with. 2 For Chemtronics, when I went back to work after 3 I got out of the hospital for knee surgery, I 4 worked for Chemtronics. They were making some 5 kind of dye grenade, smoke grenades and I helped 6 7 make those. Were you involved with production? 8 Α Yes. 9 10 0 Were you involved with any of the disposing of materials either on site or off'site? 11 12 Yes, I was involved with dumping material at the 13 main burning grounds on Northrop. And we dumped 1.1 out at the landfill on U.S. 70 where Tropigas is 15 right now. 16 What material can you recollect was burned up in 17 the burning ground? 18 We burnt the Mark 24 Flares that was rejected, 19 CS material. Most chemicals were poured into the ditch, like toluene, OCBA, MN, DDM. 20 all just abbreviations, I don't know the names. 21 220 After the material was burned, was anything done 23 with the ashes or what was remaining after being 24burned?

They would burn in the ditch until the ditch

25

Α

would get almost filled up with the ashes and stuff. They would cover it up and dig a new burning ditch on down. And then when it was completely filled almost, they would dig another ditch below it for another burning. But those ditches would last quite awhile.

- Q Okay. Do you know what types of materials were disposed at the Tropigas area?-
- A There was CS material buried there, toluene.

  There was DDM, there was magnesium dumped in there, sodium nitrate.
- Q Okay.

1.1

- A Just about all the materials that they worked with were dumped in there.
- Q Were these in drums or bags? How were they disposed of?
  - A They were in plastic jugs. The DDM were in plastic jugs. The CS was in card -- the cardboard excess material, the CS bags after they were emptied, but they had a lot of CS still in them. The MN, OCBA, was probably drained out of the drums and the drums hauled back to the site.
- 24 0 Toluene?
- A Toluene. And all the drums would be brought

1 back to the Northrop property. 2 Can you give us an approximate time that this Q 3 disposal at Tropigas was occurring or that you 4 know of? 5 Well, probably from 1966 until Northrop was 6 winding down. 7 Okay. Do you know of any other people or can Q 8 you give us the names of the people that you 9 know who were also involved with disposing of 10 waste either on site or off the site? 11 A b) (6) myself, (b) (6) 12 he is dead. That is about all I can 13 think of right now. There was more but I can't 1.1 think of their names right now. 15 Okay. 16 BY MR. JOH BORNHOLM: 17 That is all I have. 18 BY MR. JOHN SCHULTHEIS: 19 The CS material, (b) (6), you say that was mainly 20 contaminated cardboard and bags or was it 21 actually CS? 22 BY THE WITNESS: 23 It was actually CS. If the bags they were loading 2.1 CS in would be ripped or torn or anything, they 25 would dump it back out to rerun it. There was

```
1
         bags but there was a lot of CS in the bags.
2
    BY MR. JOHN SCHULTHEIS:
3
         But it wasn't like they threw out a bag full of
4
         CS in there?
5
    BY THE WITNESS:
6
         Some of it would have maybe a quarter of a bag
7
         of CS in it.
8
    BY MR. JOHN SCHULTHEIS:
9
         Okay.
10
    BY THE WITNESS:
11
          Some wouldn't.
12
    BY MR. JON BORNHOLM:
13
          This was the Tropigas area?
1.1
    BY THE WITNESS:
15
          This was the Tropigas area.
16
    EXAMINATION BY MR. ANTHONY YOUNG:
17
    Q
         Was there an operator at the Tropigas, operating
18
          engineer, bulldozer operator?
19
          There was a bulldozer operator up there.
20
          Do you recall who he was?
21
          No, sir, I sure don't.
22
          Who was your supervisor, who did you work for?
23
          My supervisor was
24
    BY MR. JOHN SCHULTHEIS:
25
         (b)(6) was killed. Who was your supervisor after
```

1 2 BY THE WITNESS: 3 (b)(6) wasn't killed. 4 BY MR. JOHN SCHULTHEIS: 5 (b)(6) left the company before you did, I believe. 6 He was shot in a hunting accident. 7 BY THE WITNESS: 8 That was Shook that got shot. -9 BY MR. JOHN SCHULTHEIS: 10 b)(6) okay. (b)(6) was the one that shot him? 11 BY THE WITNESS: 12 Yes. 13 BY MR. JOHN SCHULTHEIS: 1.4 But (b) (6) was gone, I thought, right after that 15 happened. Didn't you have anybody else that you 16 reported to besides (b)(6) 17 BY THE WITNESS: 18 (b)(6) worked there for quite awhile after that 19 accident happened. As far as I can remember, 20 (b) (6) worked there a pretty good while after that 21accident happened.  $^{22}$ EXAMINATION CONTINUED BY MR. ANTHONY YOUNG: 23Where would you pick up materials from before 2.1 you went out? You were on the truck that would 25 go to Tropigas?

1 Α Yes, I was on it. I didn't dump it everyday. 2 When they was short on the trash truck, they 3 would need another man to help out. We'd take 4 turns helping out on the trash truck. We would 5 go around to all buildings and pick up all 6 materials and take it and dump it. We would 7 take it up to the burning ground and burn it. 8 And a lot of times we would take it over to U.S. 9 70 and dump it. And a lot of times we would 10 take it to the dump beside the creek there. 11 Is that where Asheville Dye and Chemical is now? 12 Yes, yes. And we would dump it out there or 13 sometimes we would burn it or sometimes we would 1.4 dump it out there and leave it. 15 Did you go to any place on U.S. 70 besides 16 Tropigas? 17 I think we did. I think we went -- I am pretty 18 sure we went over to Beacon dumping ground but I 19 am not for sure. I'd have to go look around to 20 make sure. I can't remember. 21BY MR. JON BORNHOLM: 22What materials might have been dumped there? 23 BY THE WITNESS: 24Same thing, CS material. 25BY MR. JON BORNHOLM:

1 That same material that you dumped at Tropigas? 2 BY THE WITNESS: 3 Same as we dumped at Tropigas. 4 BY MR. JON BORNHOLM: 5 U.S. 70. 6 EXAMINATION CONTINUED BY MR. ANTHONY YOUNG: 7 When do you recall going off site, that is, 8 taking materials off the site? What year do you 9 recall doing that? From the time you started or 10 was it later on? 11 We was taking it off site and dumping it when I 12 first went to work there. 13 To Tropigas? 0 1.1 Yeah. And down where the other plant is now. Α 15 Q Okay. 16 Asheville Dye. Α 17 How were materials marked for pick up outside 0 18 the production buildings; do you recall? 19 They were supposed to be in a trash bin. Α 20 Yes. And that is where you picked up from, from 21 trash bins? 22That's where we picked up, from trash bins or 23 there would be some drums sitting to one side 21 and whoever was in charge would tell us what to

take off and to pick up.

25

I 0 Were the drums marked? 2 Α They had what was in them marked, like toluene, 3 OCBA, MN, had the names on the drums for that. 4 You said you emptied these drums when you would 5 take them off? 6 Yeah. 7 What was in the drums when you emptied them, 8 liquids? 9 Α Liquids. 10 Can you describe the liquids? 11 Just liquid. 12 Odor, did they have odors? 13 Oh, yes. OCBA was probably the main ingredient 1.1 for CS. 15 Yes. 16 And MN, they both had an odor. 17 BY MR. JON BORNHOLM: 18 You took the drums to the wherever you disposed 19 of it and then emptied them there and then took 20 the drums back? 21 BY THE WITNESS: 22Yeah, if they had any stuff in them that would 23 pour out, we would pour it out. And we stored 24 the drums on site until we got overloaded and

then they started getting rid of them.

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- I	EXAMINATION CONTINUED BY MR. ANTHONY TOUNG:
2	Q Were the drums ever filled with trash or other
3	kinds of materials or was it always liquid type
4	materials?
5	A It would be liquid type materials because the
6	only way you could load them up would be through
7	the drum hole. (phonetic)
8	Q Did you ever leave drums off site?
9	A Not
10	Q You recall emptying them and bringing them back
1 1	rather than just leaving the drum out there?
12	A We've left some drums, especially down at the
13	creekbed we would leave what those ejectors and
14	stuff was in. They were in these small
15	magnesium barrels. They would be left down
16	there.
17	Q Do you recall picking up fiber drums, would
18	you pick up fiber drums filled with stuff?
19	A Yes, fiber drums, we would dump them off up at
20	the landfill.
21	BY MR. JON BORNHOLM:
22	Drums and everything?
23	BY THE WITNESS:
24	Drums and all.
25	BY MR. JON BORNHOLM:

1 Do you know what those drums contained? 2 BY THE WITNESS: 3 Sodium nitrate and stuff like that. 4 EXAMINATION BY MR. BOB WARREN: 5 Do you recall if (b)(b) youngest brother was 6 one of the people who worked in disposal? 7 Α 8 Well, the younger brother than him? 9 recall a truck burning up at one time? 10 Oh, yes. 11 Do you remember who was driving that truck? 12 (b) (6) was in it and I think (b) (6) was with them. 13 0 Yes. 1.1 But I don't remember the others because I wasn't 15 there when the truck burnt up. I was down on 16 the other end of the plant. 17 Q When you said you picked up materials around the 18site, do you remember any time when they had 19 defective grenades? Do you remember the time 20when there was some defective grenades there? 21Α Yeah, but I wasn't on at that particular time. 22 Q Okay. Did you ever have any duties taking 23anything to get x-rayed? 24 Yeah. We would take the Mark 24's from each 25 lot, you know, when they would make a lot and

1 the Government would approve it, we would take 2 them up to the x-ray lab to have them x-rayed 3 for cracks or defects. And they would x-ray 4 them and if they were okay, we would take them 5 back down and they would put them back in the 6 lot. 7 And what if they weren't okay? 8 They would be put -- trashed to be took up to Α 9 the burning ground. 10 Now, these were big materials? 11 Yeah, these were about two feet long Mark 24 12 Flares. 13 Okay. 1.1 And they would x-ray them and if they were okay, 15 we would take them back. If they were cracked 16 or anything, they ---17 Where were you when they were x-rayed? 18 We were in the x-ray room with them. 19 Now, did you ever have any reaction to CS? 20 BY MR. JON BORNHOLM: 21 This is just for disposal. 22BY MR. BOB WARREN: 23 I know but I am trying -- he said he has 24 identified CS and that is what I am trying to 25 figure out. The next question is how many times

did you have that reaction when you were disposing of CS, so that we will know that he was recognizing CS.

#### BY MR. CHARLES CASE:

John, let's keep this to disposal. If he wants to talk to his client later, that is fine.

#### EXAMINATION CONTINUED BY MR. BOB WARREN:

- Q How did you know you were disposing of CS?
- I went down to get some OCBA out of the warmer one night and was taking it out. It slipped off the hand truck and me and the hand truck and the drum slid to the floor and it got all over me.

  Before I could get down to the nurses' aide, I was broke out in big blisters. She gave me a shot and I went and took a shower and went back to work.

#### BY MR. JON BORNHOLM:

Where were you taking this to? '

#### BY THE WITNESS:

To 113 for CS, they were making CS.

#### BY MR. ANTHONY YOUNG:

That was raw material?

#### BY THE WITNESS:

That was raw material.

BY MR. JON BORNHOLM:

1 So you weren't taking it off for disposal then? 2 BY THE WITNESS: 3 No, I was taking it up to 113. 4 BY MR. BOB WARREN: 5 But then when it spilled, you did have to 6 dispose of it? 7 BY THE WITNESS: 8 Then we had to dispose of the drum. 9 BY MR. JON BORNHOLM: 10 Where did that go; do you have any idea? 11 BY THE WITNESS: 12 We had to clean it up, the floor and everything 13 with rags, then hose it down. We put the rags 14 in a plastic bag, tied it up and took it up to 15 the burning ground and throwed it in the burning 16 ditch. 17 EXAMINATION CONTINUED BY MR. BOB WARREN: 18 Now, I may not be calling this right but do you 19 recall a building that had a tunnel in it or 20 was ---21Yes. 22Could you tell them about what went on in that 23 building as far as disposal?  $^{24}$ Α Yes. He and (b) (6) were on duty and they 25 had some toluene and DDM that was -- the date

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had expired on it, I think. And they wanted to get rid of it so we went back in there and the floor is -- it has got a big drain in the middle of the floor, it's just a big drain that goes out into the creek. We went in there and dumped all the toluene and DDM down through the drain that goes down into the branch, creek.

### BY MR. ANTHONY YOUNG:

Do you remember the building number?

#### BY THE WITNESS:

I believe it was 112 but I am not for sure.

#### BY MR. ANTHONY YOUNG:

And it had a tunnel in it?

#### BY THE WITNESS:

Yes, it has got a tunnel. It looks like a loading ramp when you -- if you pass it from the street, it looks like a loading ramp dock that you go through the tunnel into the building.

#### BY MR. JOHN SCHULTHEIS:

It was near building 113?

#### BY THE WITNESS:

Yes, it is right up from 113.

#### EXAMINATION CONTINUED BY MR. BOB WARREN:

Q And were any other materials disposed in that building? Have you ever seen any material being

1 taken in there and disposed of? 2 Yes, there was a lot of materials taken in there 3 and dumped down the drain. 4 BY MR. JOHN SCHULTHEIS: 5 Was that your instructions to do that? 6 BY THE WITNESS: 7 To get rid of it. 8 BY MR. JON BORNHOLM: 9 Can you describe what materials? 10 BY THE WITNESS: 11 Well, there was that DDM, toluene, I don't know 12 of any OCBA or MN that was dumped in there for 13 sure. I didn't dump any of that in there but I 1.1 did dump the toluene, DDM, butyl acetate, dumped 15 it in there. And I think acetone -- no, didn't 16 put no acetone in there. It was another 17 chemical that I can't remember that far back. 18 BY MR. JON BORNHOLM: 19 Jon, what is DDM? 20BY MR. JOHN SCHULTHEIS: 21It is used as part of a binder in flare 22manufacturing. 23 BY MR. JON BORNHOLM: 24Is that a reactive chemical? 25 BY MR. JOHN SCHULTHEIS:

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No. You have to use a -- it is a curing agent, really. You have to use an accelerator to get it to work with a two part system to make your styrene to set up.

## BY MR. JON BORNHOLM:

Okay.

#### BY MR. ANTHONY YOUNG:

Were these all liquids?

#### BY THE WITNESS:

These were all liquids.

#### BY MR. ANTHONY YOUNG:

How did you know it went down to Bee Tree? BY THE WITNESS:

That is where the drainage system goes, into the creek. There is a creek that runs down right in front of 128 all the way down through past 103 down. When they would dump these chemicals in that drainage system, you could see it going down the creek, it would change colors and you could smell it.

# BY MR. BOB WARREN:

Did you have ever have any dealing with BZ and the disposal of BZ?

# BY THE WITNESS:

Yes. They were cleaning up Building 113 to

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build this CS2, that is where they had made the BZ before. They come across some contaminated material and they packaged it up and put it in plastic bags and tied it up. We took it up to the burning ground and throwed it in the burning ditch.

#### BY MR. JON BORNHOLM:

In the burning ground?

#### BY THE WITNESS:

In the big burning ground. And it was burnt.

#### EXAMINATION CONTINUED BY MR. BOB WARREN:

- Q Do you ever recall having any sweeping duties or were around anybody when BZ was being swept up?
- A Not to my knowledge.
- Q Do you remember anybody questioning you how you reacted one time around BZ?
- A Yeah. (b) (6)

  contaminated BZ up to the burning grounds. They asked me about the way I was acting. They said

  I was acting kind of funny and everything.
- Q Do you have any recollection of how you were feeling?
- A I don't remember. They told me about it several days after that and I couldn't remember it.
- Q When you were working at Northrop, did you have

any instructions as far as the secret operations that were going on there?

- When I hired in at Northrop, everybody that was hired in there, they would go in and have an interview with you. Then when they decided to hire you, they would take you into another conference room and explain the jobs to you and tell you that whatever went on in here you don't talk to nobody or say anything to anybody after you go out these gates. They said it was Government work and it was highly confidential. It was secret work and they didn't want us to talk to anybody. So I didn't talk to nobody, I didn't even tell my (b) (6) or nobody what was going on in there.
- Q (b)(6), you have been here for quite awhile and you've just recently gotten over what?
- A Two surgeries.
- Q Okay.
- A Disc problems, I had to have three discs replaced.

# BY MR. BOB WARREN:

I don't have any further questions.

# BY MR. JON BORNHOLM:

I just have one last one. Do you know whether

1 or not a kill solution was added to the CS that 2 was disposed of either on site or off the site? 3 BY THE WITNESS: 4 No, nothing was used on it. It was dumped just 5 exactly the way it came out. 6 EXAMINATION BY MR. ANTHONY YOUNG: 7 You swept up in this one building and took some 0 8 BZ contaminated materials to the burning ground? 9 Α No, I didn't sweep up in the building. They 10 swept it up, the men that worked in 113 cleaned 11 it up and swept it up. Me and my partner just 12 hauled the material up to the burning ground and 13 throwed it in the burning ditch. 1.1 And this was in plastic bags, the material? 15 Yes. 16 What color was the plastic bags; do you recall? 17 Α Clear. 18 Clear plastic bags. How did you all know it was 19 BZ? 20 The foreman told us to take it up there, it was 21 BZ contaminated material. 22Who was the foreman? thera line Mik 23John Thomas, I think. I'm pretty sure it was 24 John Thomas. He is deceased. He was the 25 foreman on second shift and me and

usually worked mostly second shift. So he is the one that give us instructions on where to take it and everything.

#### BY MR. JON BORNHOLM:

I just want to clarify one point. The CS material that was disposed of at Tropigas or in one of the disposal areas that you were involved with was not neutralized with a kill solution?

#### BY THE WITNESS:

It was not neutralized or anything. It was just taken up there straight from the loading.

#### BY MR. JON BORNHOLM:

Do you know if any of the CS or BZ that was disposed of was neutralized prior to disposal?

#### BY THE WITNESS:

No, nothing was neutralized.

#### BY MR. JOHN SCHULTHEIS:

In the disposal at Tropigas of CS, I don't recall, did you dispose of CS grenades at that

# BY THE WITNESS:

I didn't, no.

#### BY MR. ANTHONY YOUNG:

Do you know how BZ was neutralized?

#### BY THE WITNESS:

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ì No. I don't know it was neutralized. 2 BY MR. ANTHONY YOUNG: 3 Do you know how CS was neutralized? 4 BY THE WITNESS: 5 No. I never did see it neutralized. When we 6 would take it off ---7 BY MR. ANTHONY YOUNG: 8 It would be out there for you?-9 BY THE WITNESS: 10 It would be there and they would be bringing it 11 out of the building. There was nothing mixed 12 with it or anything. We just took it straight 13 like it was. 1.1 BY MR. JON BORNHOLM: 15 It was a white powder? 16 BY THE WITNESS: 17 White powder. 18 BY MR. ANTHONY YOUNG: 19 So you don't know what happened to it in the 20 building? 21 BY THE WITNESS: 22Sure. 23BY MR. ANTHONY YOUNG: 24 What happened to it in the building? 25 BY THE WITNESS:

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         It comes through this loading hopper into these
2
         bags and they sew it up and package it in drums.
3
    BY MR. ANTHONY YOUNG:
.1
         That is CS?
5
    BY THE WITNESS:
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         CS powder.
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    BY MR. ANTHONY YOUNG:
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         Were you there when BZ was manufactured?
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    BY THE WITNESS:
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         No.
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    BY MR. ANTHONY YOUNG:
12
         That's all.
13
    BY MR. JON BORNHOLM:
1.1
                      that's all.
15
    (AT APPROXIMATELY 2:50 P. M., THE PROCEEDINGS IN THE
16
    ABOVE-ENTITLED MATTER WERE CONCLUDED)
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#### CERTIFICATE

S

1.1

This is to certify that the within interview was taken on 11 December 1985 beginning at 2:25 P.M.

That all exhibits, if any, entered herein are attached hereto and made a part of this record:

That the undersigned court reporter, a notary public for the State of North Carolina, is not an employee or relative of any of the parties, counsel or witness and is not in any manner interested in the outcome of this action;

In witness whereof, I have hereunto set my hand and seal this 14th day of December, 1985.

Notary Public for North Carolina Commission expires: 9 May 1989

(seal)

	i
1	I, (b) (6)
2	foregoing 172 pages of testimony given by me on Tuesday,
3	May 16, 1989, in Asheville, North Carolina.
4	The testimony should be corrected as follows:
5	PAGE LINE CORRECTION AND REASON THEREFOR
6	y 21,22 I gent finished the sixth- Stanted into the seventh
7	into the seventh
8	170 13 "1 And fills"
9	
10	
11	
12	
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14	
15	Subject to the foregoing corrections, my
16	testimony is as contained in the foregoing deposition.
17	H Signed at History / C
18	this, day of, the state of the foregoing deposition.  He signed at, 1989.
19	(b) (6)
20	
21	Subscribed to and sworm to Perental inder penaltic
22	subscribed to and sworn to  Here me, this day of perjuny under the  14 of the State of the  NOTARY PUBLIC
23	1 Hws of the State of Chitown
24	
25	My Commission expires:
	I